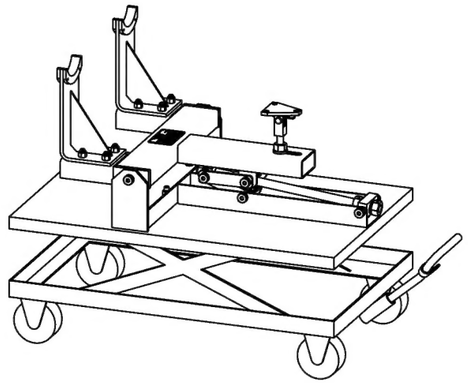
ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
								2		-1		BASE EARS	1018/1020 CR		3
								X		-2	1	BASE WELDMENT			4
								1		-3		BASE TRAY	1018/1020 CR		5
								1		-5		BASE ARM	1018/1020 CR		6
							2			-7		END PLATE	A36/1018/1020 HR		7
							2			-9		PIVOT TABS	1018/1020 CR		8
							2			-11		CRADLE MOUNT	1018/1020 CR		9
							1			-13		CROSS TUBE	STEEL TUBE		10
							X			-14	1	CARRIAGE WELDMENT			11
							1			-15		TUBE	STEEL TUBE		12
					1	X				-17		CRADLE WELDMENT			13
						1				-17A		CRADLE ARM	A36/1018/1020 HR		14
						1				-17B		CRADLE ARM GUSSET	A36/1018/1020 HR		15
					X					-18	2	CRADLE ARM ASSEMBLY			16
					1					-19		CRADLE PAD	DELRIN/ACETAL		17
				X						-21	1	NUT PLATE WELDMENT			18
				1						-21A		PLATE	A36/1018/1020 HR		19
				1					B/O	-21B		WELDNUT	STEEL	1/2-13, HEX (MCMASTER-CARR #93560A180)	18
									B/O	-22	1	CLEVIS PIN	S.S.	Ø3/8 X 1, 3/4 USABLE (MCMASTER-CARR #92390A269)	2
									B/O	-23	1	FLANGE NUT	S.S.	1/2-13, Ø1-1/8 FLANGE (MCMASTER-CARR #94758A033)	2
									B/O	-24	1	HAIR PIN	S.S.	Ø5/64 WIRE X Ø1/4 EYE X 1-1/2 (MCMASTER-CARR #92391A044)	2
			X							-25	1	STUD WELDMENT			20
			1						B/O	-25A		ALL THREAD	STEEL	1/2-13 X 3, GRADE B7 (MCMASTER-CARR #98750A103)	20
			1							-25B		TAPPED CLEVIS YOKE	STEEL	Ø3/8 HOLE, 1/2-20 (APPLIED #L071300500) MODIFIED	21
		X								-27	1	FRONT ENGINE MOUNT WELDMENT			22
		1								-27A		MOUNT PLATE	A36/1018/1020 HR		23
		1								-27B		TAB	A36/1018/1020 HR		24
	X									-28	1	REAR PIVOT BLOCK WELDMENT			25
	1								B/O	-29		ACME NUT	STEEL	5/8-8 ACME (MCMASTER-CARR #94815A108)	25
	1									-29A		REAR PIVOT BLOCK	A36/1018/1020 HR		26
										-29B	1	FRONT PIVOT BLOCK	A36/1018/1020 HR		27
										-31	4	LINK	A36/1018/1020 HR		28
										-33	1	ACME THREADED ROD ROD	S.S.	5/8-8 (MCMASTER-CARR #95061A825) MODIFIED	29
										-35	1	ACME NUT DRILLED FOR ROLL PIN	S.S.	5/8-8 ACME (MCMASTER-CARR #95066A213) MODIFIED	30
										-36	2	ACME NUT DRILLED FOR SET SCREW	S.S.	5/8-8 ACME (MCMASTER-CARR #95066A213) MODIFIED	31
									B/O	-37	2	THRUST BEARING	STEEL	Ø5/8 BORE (APPLIED #TORRINGTON NTA 1018)	2
									B/O	-39	4	THRUST BEARING RACE	STEEL	Ø5/8 BORE (APPLIED #TORRINGTON TRA 1018)	2
									B/O	-40	1	ROLL PIN	S.S.	Ø5/32 X 7/8 (MCMASTER-CARR #92373A216)	2
									B/O	-41	2	SOCKET HEAD SET SCREWS	S.S.	10-24 X 1/4 (MCMASTER-CARR #92311A238)	2
									B/O	-43	6	SOCKET HEAD SHOULDER BOLTS	S.S.	Ø1/2 X 3/8, 3/8-16 (MCMASTER-CARR #90298A705)	2
									B/O	-44	4	SOCKET HEAD SHOULDER BOLTS	S.S.	Ø1/2 X 1/2, 3/8-16 (MCMASTER-CARR #90298A707)	2
									B/O	-45	21	NYLOCK NUTS	S.S.	3/8-16 (MCMASTER-CARR #91831A127)	2
									B/O	-46	24	MACHINE BUSHING WASHERS	S.S.	Ø3/4 O.D. X Ø1/2 I.D. X .030 (MCMASTER-CARR #97022A497)	2
									B/O	-47	17	HEX HEAD CAP SCREWS	S.S.	3/8-16 X 1 (MCMASTER-CARR #92240A624)	2
									B/O	-49	8	FLAT WASHERS	S.S.	Ø.406 I.D. X Ø.750 O.D. (MCMASTER-CARR #98370A019)	2
										-51	1	HYDRAULIC LIFT CART ASSEMBLY		17-3/4 X 27-1/2 (GRAINGER, DAYTON #3KR46J) MODIFIED	32
X										-53	1	PUMP HANDLE WELDMENT			33
1										-55		CABLE STOP	1018/1020 CR		34
1										-57		RELEASE HANDLE PIVOT	1018/1020 CR		35
						2			B/O	-59		ROLL PIN	S.S.	Ø1/8 X 3/4 (MCMASTER-CARR #92373A181)	16
									B/O		1	PLACARD	ALUMINUM	RB41011 OR RB41009 SEE NOTE 4 SHEET 2	2
ASSY -53	ASSY -28	ASSY -27	ASSY -25	ASSY -21	ASSY -18	ASSY -17	ASSY -14	ASSY -2							

REVISIONS

REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-19 MATERIAL CHANGED TO UHMW DUE TO CRACKING PROBLEMS.	10/15/2001		
2		-19 RADIUS INCREASED TO Ø3.220 FOR BETTER FIT ON ENGINE. ALSO -15 SLOT LENGTHENED TO ALLOW FOR GREATER ADJUSTMENT.	2/22/2002		
3		-17 RADIUS INCREASED TO R1.720, & EARS SHORTENED.			
4		CHANGED -27B TAB TO MATE WITH OFF THE SHELF CLEVIS.	6/3/2002		
5		-3 FOUR HOLES CHANGED TO SLOTS TO BETTER FIT LIFT TABLE	5/7/2003		
6		CHANGED -3 FOUR SLOTS TO HOLES AND APPROPRIATELY PLACED THEM. ADDED C-BORES TO -29 PIVOT BLOCK. ADDED -53 & -55 & -57 DWG'S TO FILE FROM HAND PRINTS.	11/21/2006	WP	
7		CONSOLIDATED 17 FILES INTO 1 FILE. ORGANIZED ALL DWG'S, SUPPLIED MISSING DATA & DRAWINGS, IMPLEMENTED NEW TITLE BLOCK, BOM, & REVISIONS TABLE.	2/27/2008	WP	
8		ADDED PG. 16 OF 16. CH'D -19 DIM .125 TO 1.19,, ADDED RB PLACARD -60 TO BOM.	5/12/2009	WP	
8A		ADDED NOTES 1 & 2, CH'D ALL BOM HARDWARE FROM STEEL TO S.S. & ADDED P/N'S PER R.W.	8/31/2011	RJC	
9		CH'D TITLEBLOCK TOLERANCES FROM .005, .01, .1. ADDED -14 MISSING 10.50 DIM BETWEEN HOLES ON -11 MOUNTS & CH'D SOME TOLERANCES. ADDED -17A P.F. -59 TO Ø.125 PER G.E.	12/1/2011	RJC	
10		CH'D -14 DIM FROM 7.3 TO 7.3±.015 AND ADDED NOTE PER S.E.	5/7/2012	RJC	SE
11		-27A ADDED NESTING POCKET TO PART. -27B CH'D DIM WAS 1.00 IS 1.015 PER G.E.	3/29/2013	BIM	GE
12	15-0347	UPDATED TO NEW DRAFTING STANDARDS. ADDED ADJUSTMENT NOTE SHEET 2. **-1** CH'D DIM WAS Ø.500 IS Ø.520 +.010 -.000. **-2** CH'D DIMS WAS 16.63 IS (16.630), WAS 5.563 IS (5.563). DELETED DIM 19.00. **-3** CH'D DIMS WAS 5X Ø.375 IS 5X Ø.406, WAS R MIN IS 2X R.25 MAX, WAS 14.88 IS 2X 14.88, WAS 7.44 IS 2X 7.44, WAS .88 IS 2X .88, WAS 1.75 IS 2X 1.75, WAS 10ga IS .13(10ga), WAS 1.75 IS 2X 1.75. **-5** CH'D DIMS WAS 4X Ø.375 IS 4X Ø.406, WAS 4X Ø.500 IS 4X Ø.520 +.010 -.000, WAS R MIN IS 2X R.25 MAX, WAS 4X 1.375 IS 2X 1.375, WAS 2X 15.50 IS 15.50, WAS 2X 5.56 IS 5.56. **-7** CH'D DIM WAS .375 IS .38. **-9** CH'D DIMS WAS Ø.500 IS Ø.520 +.010 -.000, WAS .188 IS .19. **-11** CH'D DIMS WAS 4X Ø.375 IS 4X Ø.406, WAS R MIN IS 2X R.25 MAX, WAS 10ga IS .13(10ga). **-13** CH'D DIM WAS (.120) IS .12. **--14** CH'D DIMS WAS 8.0 IS (8.000), WAS 16.0 IS (16.000), WAS 18.0 IS (18.000), WAS 4.500 IS (4.500), WAS .813 IS (.813), WAS 4X .875 IS (4X .875). DELETED DIM 5.1. **-15** CH'D DIMS WAS Ø.500 IS Ø.547, WAS 8.875 IS 8.125, WAS 2.00 IS 1.50, WAS (.120) IS .12.. **-17** ADDED DIM (5.000). **-17A** MOVED Ø.125 HOLES TO **-18** ASSY. CH'D DIM WAS 4X Ø.375 IS 4X Ø.406. **-17B** CH'D DIM WAS 10ga IS .13(10ga). **-18** ADDED DIM 2X Ø.125-.129. ADDED TEMPLATE NOTE. **-19** CH'D DIMS WAS 2X 1.53 IS (2X 1.530), WAS 2X 1.29 IS (1.290), WAS 2X Ø.125 IS 2X Ø.125-129. ADDED DIMS 2X .94, (2X .593), 2.58, .47. **-21** ADDED CENTER NOTE. **-21B** ADDED B/O REF #93560A180. **-25A** ADDED B/O REF #98750A103. **-27** CH'D DIM WAS .250 IS .25. **-27A** DELETED DIMS 4X .063, 1.130. CH'D DIM WAS 22º IS (22º). ADDED 4X CORNER RELIEF NOTE. **-27B** CH'D DIMS WAS Ø.377 IS Ø.3780-.3815. WAS .60 IS .615, WAS 1.015 IS 1.02. **-28** ADDED CENTER NOTE. **-29** ADDED B/O REF #94815A108. **-29B** CH'D DIMS WAS 2.75 IS 2.50, WAS 2X 3/8-16 UNC ⌴ Ø.500 ↧.125 IS 3/8-16 UNC-2B. **-31** CH'D DIMS WAS Ø.500 IS 2X Ø.504-.508, WAS R.25 IS 4X R.25, WAS .188 IS .19. **-33** CH'D DIM WAS Ø.156 IS Ø.156-.160. ADDED DIM (5/8-8 ACME-2G). **-35** DELETED FINISH. CH'D DIMS WAS Ø.156 IS Ø.156-.160, WAS (.275) IS .28. **-36** DELETED FINISH. CH'D DIMS WAS (.275) IS .28, WAS 10-24 UNC ONE SIDE IS 10-24 UNC-2B ↧.38. **-39** CH'D QTY WAS 2 IS 4. **-43** CH'D QTY WAS 8 IS 6. **-44** CH'D QTY WAS 2 IS 4. **-46** CH'D QTY WAS 20 IS 24. **-51** ADDED DIMS (2X 7.440), (2X 7.440), (2X 18.375), (17.500), (2X 16.625), (11.000), (6.000), (2X 1.000). ADDED POSITION NOTE. **-55** ADDED DIMS R.13, .83, .90, (.73), (.73). **-57** DELETED DIMS 1-1/8, 1-1/4. ADDED DIMS 1.56, 1.29. CH'D DIMS WAS R3/8 IS R.38, WAS R5/16 IS R.31. CH'D TOLERANCES ON NON-CRITICAL DIMENSIONS. ADDED ADJUSTMENT NOTE.	11/6/2015	DPD	JAG
13	16-0203	**-17A** CH'D MATERIAL WAS A709 GRADE 36 IS A36/1018/1020 HR. **-17B** CH'D MATERIAL WAS 1018/1020 CR IS A36/1018/1020 HR. **-18** CORRECTED P/N WAS -17A IS -17. **-19** CH'D MATERIAL WAS BLACK UHMW IS DELRIN/ACETAL. CH'D PART NUMBER WAS RB41011 IS PLACARD 4. ADDED NOTE 4.	11/2/2016	RJC	JAG
14	17-0043	**-17** ADDED DIM'S R1.72, 1.290, 2.580, 1.13, 2X .940, 2X Ø.129/.125 THRU ALL (P.F. -59). **-17A** DELETED DIM'S 1.13, 6.50 R1.72, ADDED DIM 7.63. **-18** DELETED FRONT VIEW WITH 2X Ø.129/.125 THRU ALL 4. DELETED NOTE 4.	2/13/2017	RJC	JAG



DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301 REV 14

MAT'L	
HEAT TREAT	
FINISH	
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

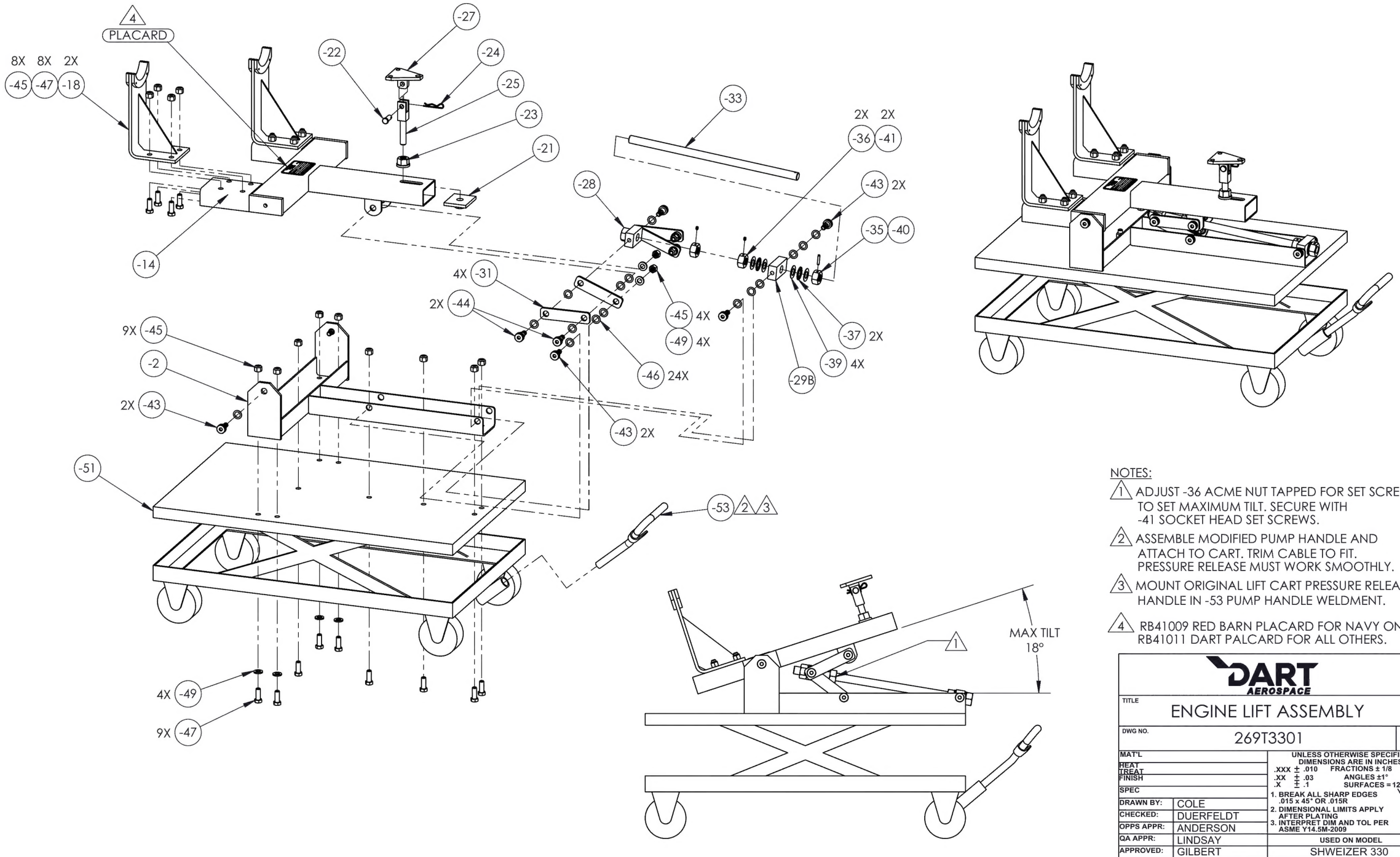
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:10 DATE 5/22/2001 SHEET 1 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
13	16-0203	CH'D PART NUMBER WAS RB41011 IS PLACARD 4 . ADDED NOTE 4 .	11/2/2016	RJC	JAG



NOTES:

1. ADJUST -36 ACME NUT TAPPED FOR SET SCREW TO SET MAXIMUM TILT. SECURE WITH -41 SOCKET HEAD SET SCREWS.
2. ASSEMBLE MODIFIED PUMP HANDLE AND ATTACH TO CART. TRIM CABLE TO FIT. PRESSURE RELEASE MUST WORK SMOOTHLY.
3. MOUNT ORIGINAL LIFT CART PRESSURE RELEASE HANDLE IN -53 PUMP HANDLE WELDMENT.
4. RB41009 RED BARN PLACARD FOR NAVY ONLY. RB41011 DART PALCARD FOR ALL OTHERS.

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301 REV 14

MAT'L	
HEAT TREAT	
FINISH	
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

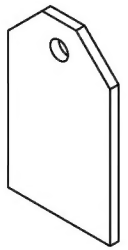
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

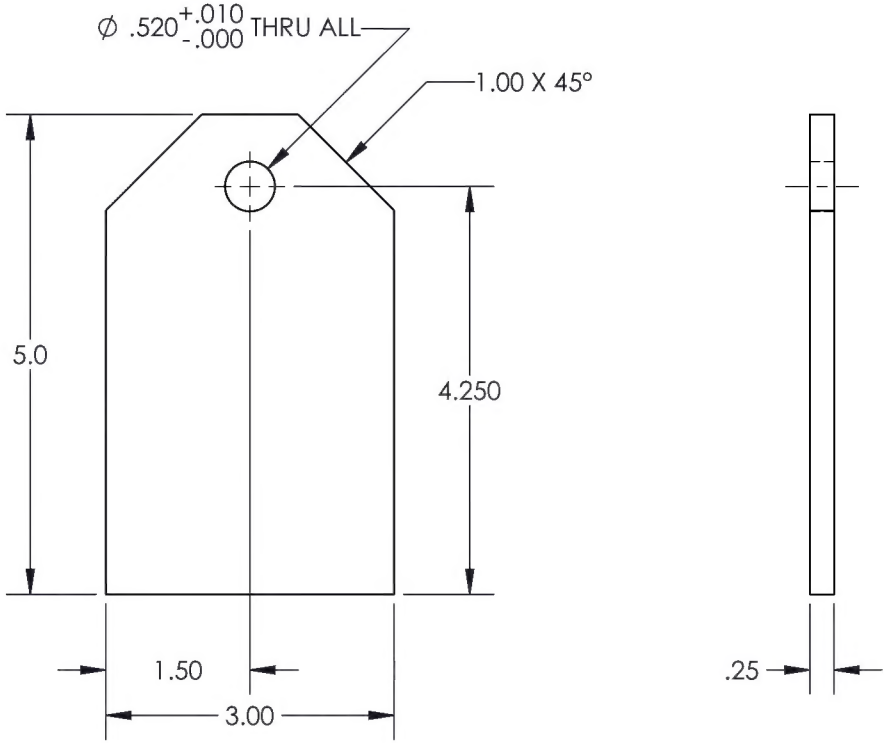
USED ON MODEL: SHWEIZER 330

SCALE 1:8 | DATE 5/22/2001 | SHEET 2 OF 37

REVISIONS

REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-1** CH'D DIM WAS Ø.500 IS Ø.520 +.010 -.000.	11/6/2015	DPD	JAG





-1

BASE EARS

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-1 REV 14

MAT'L	1018/1020 CR
HEAT TREAT	
FINISH	SEE -2 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

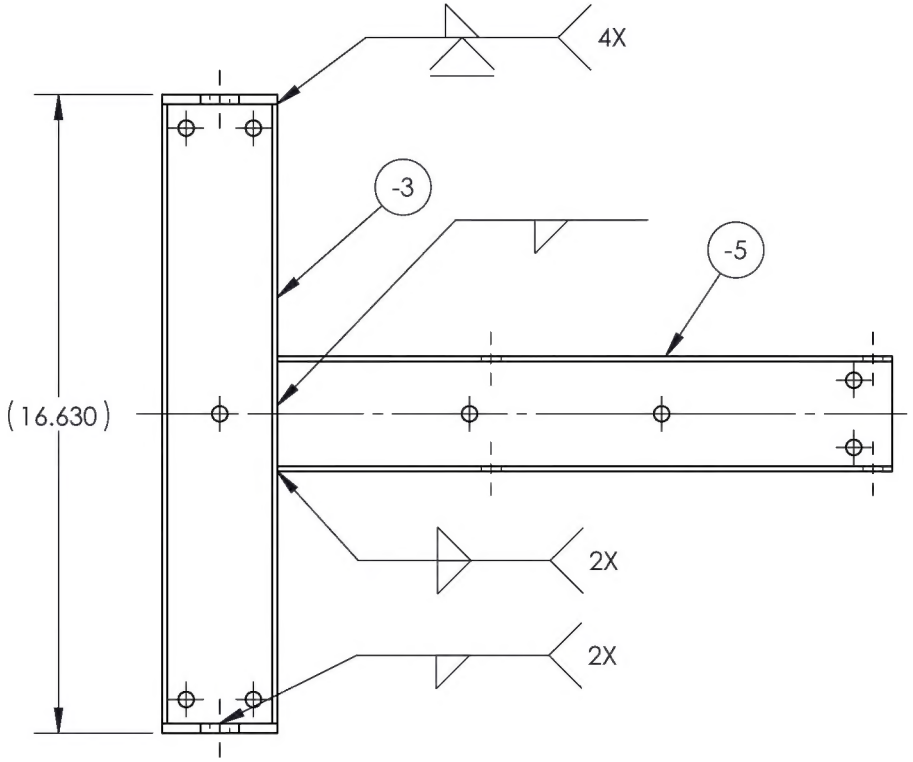
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

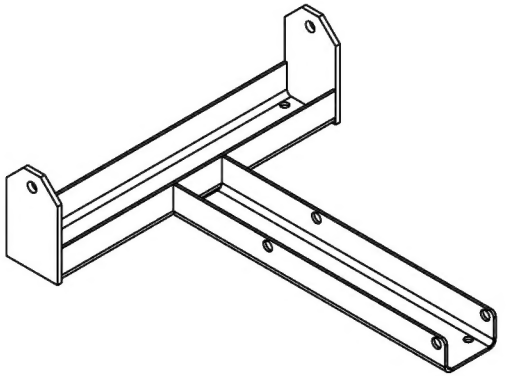
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

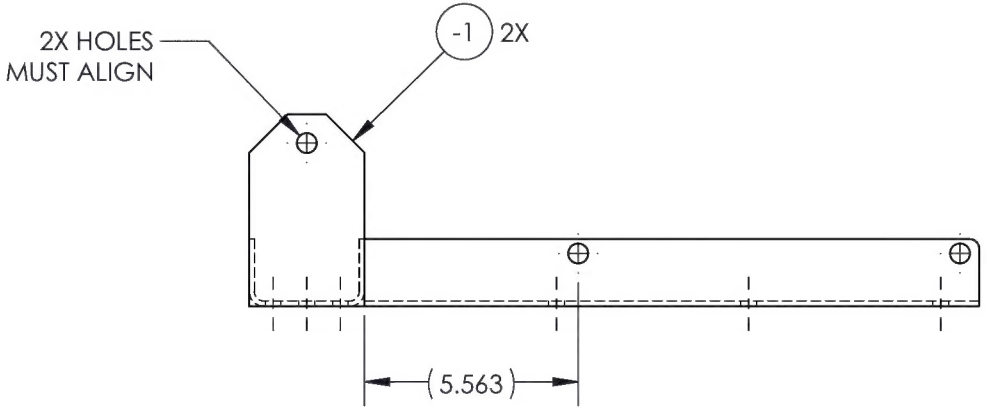
USED ON MODEL: SHWEIZER 330

SCALE 1:2 DATE 5/22/2001 SHEET 3 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-2** CH'D DIMS WAS 16.63 IS (16.630), WAS 5.563 IS (5.563). DELETED DIM 19.00.	11/6/2015	DPD	JAG







-2

BASE WELDMENT

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-2 REV 14

MAT'L	
HEAT TREAT	
FINISH	POWDER COAT WHITE
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

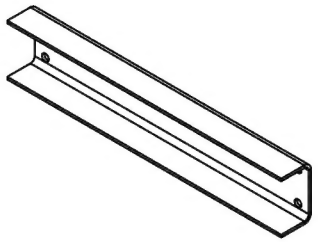
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

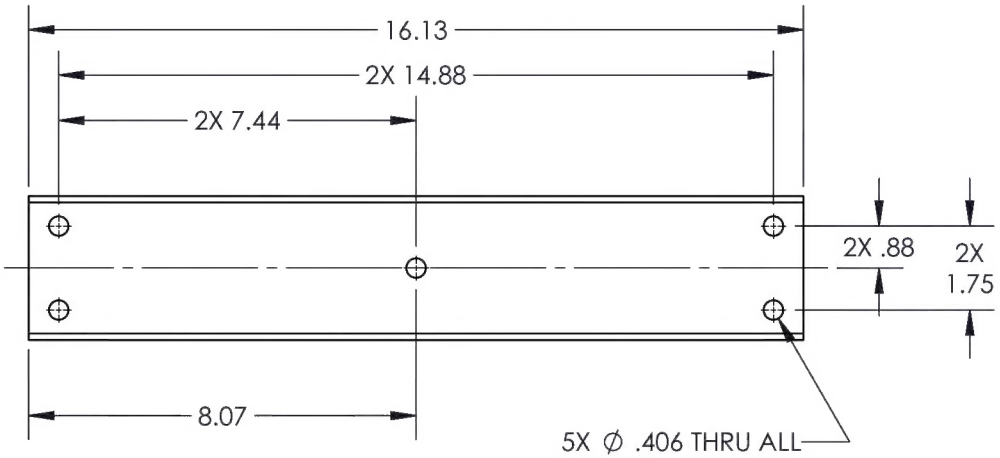
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

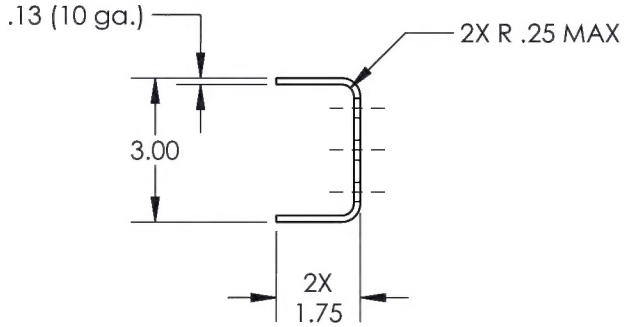
USED ON MODEL: SHWEIZER 330

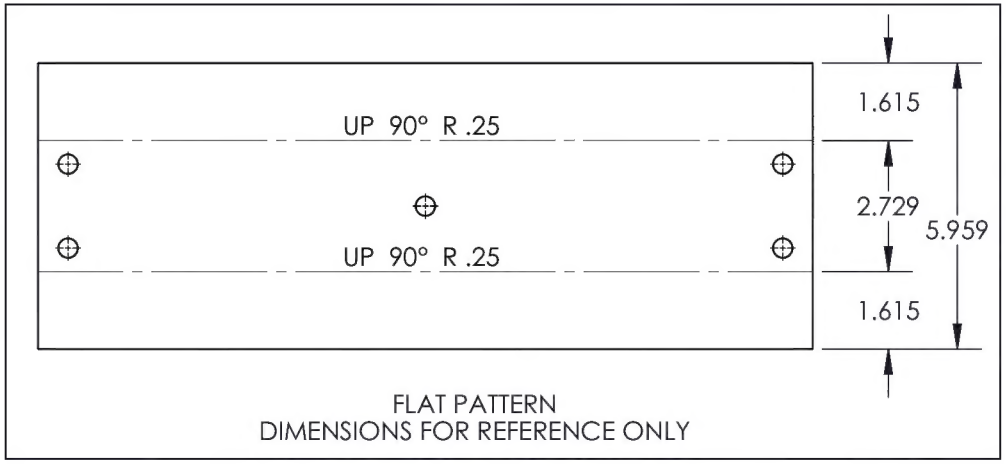
SCALE 1:5 DATE 5/22/2001 SHEET 4 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
5		-3 FOUR HOLES CHANGED TO SLOTS TO BETTER FIT LIFT TABLE.	5/7/2003		
6		CHANGED -3 FOUR SLOTS TO HOLES AND APPROPRIATELY PLACED THEM.	11/21/2006	WP	
12	15-0347	**-3** CH'D DIMS WAS 5X Ø.375 IS 5X Ø.406, WAS R MIN IS 2X R.25 MAX, WAS 14.88 IS 2X 14.88, WAS 7.44 IS 2X 7.44, WAS .88 IS 2X .88, WAS 1.75 IS 2X 1.75, WAS 10ga IS .13(10ga), WAS 1.75 IS 2X 1.75.	11/6/2015	DPD	JAG









FLAT PATTERN
DIMENSIONS FOR REFERENCE ONLY

-3

BASE TRAY

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-3 REV 14

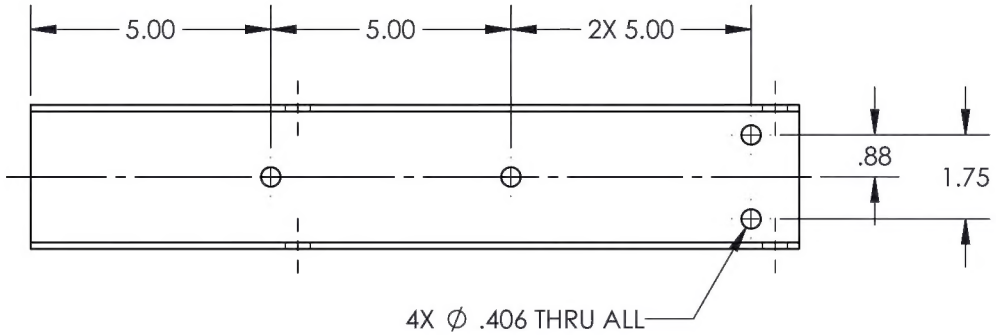
MAT'L	1018/1020 CR
HEAT TREAT	
FINISH	SEE -2 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

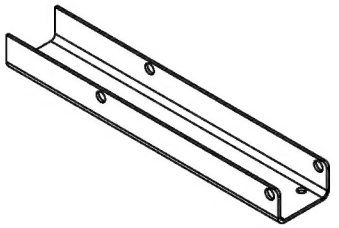
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

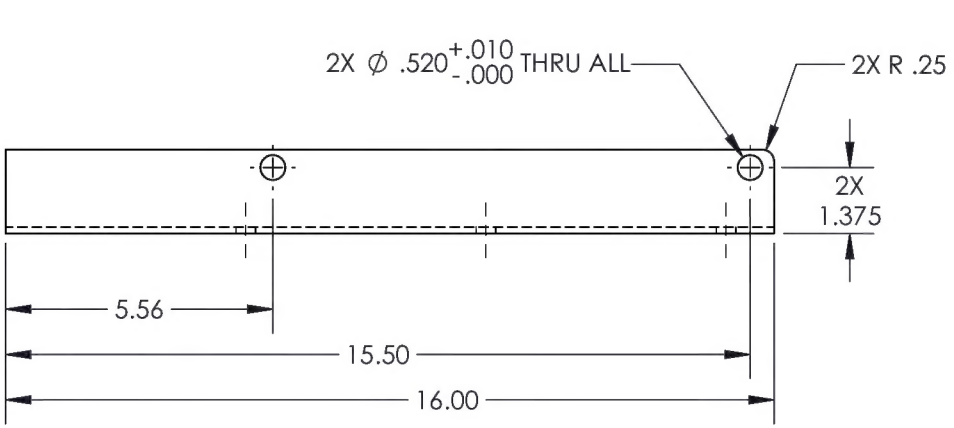
USED ON MODEL: SHWEIZER 330

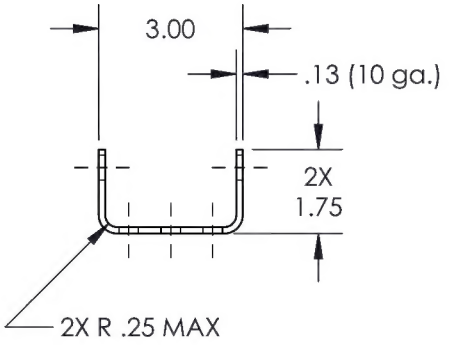
SCALE 1:4 DATE 5/22/2001 SHEET 5 OF 37

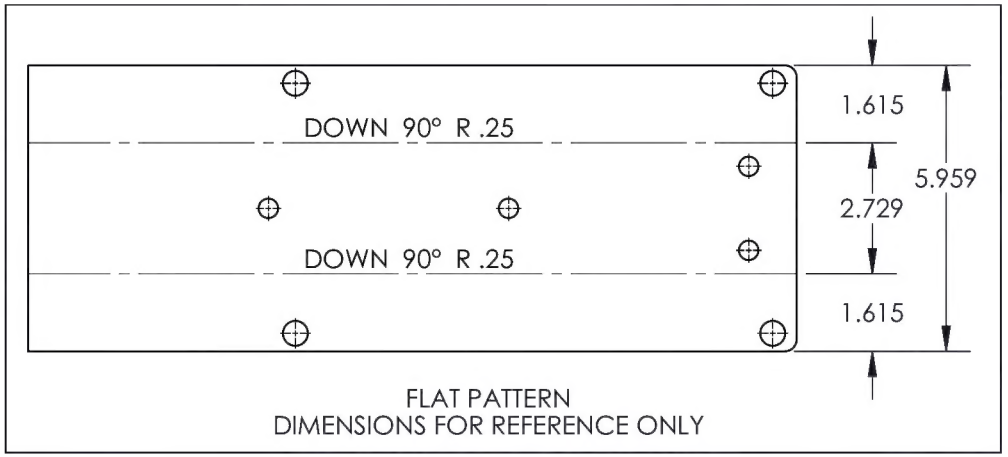
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-5** CH'D DIMS WAS 4X Ø.375 IS 4X Ø.406, WAS 4X Ø.500 IS 4X Ø.520 +.010 -.000, WAS R MIN IS 2X R.25 MAX, WAS 4X 1.375 IS 2X 1.375, WAS 2X 15.50 IS 15.50, WAS 2X 5.56 IS 5.56.	11/6/2015	DPD	JAG











(-5)

BASE ARM

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-5 REV 14

MAT'L	1018/1020 CR
HEAT TREAT	
FINISH	SEE -2 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

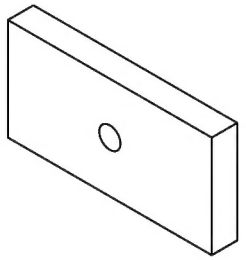
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

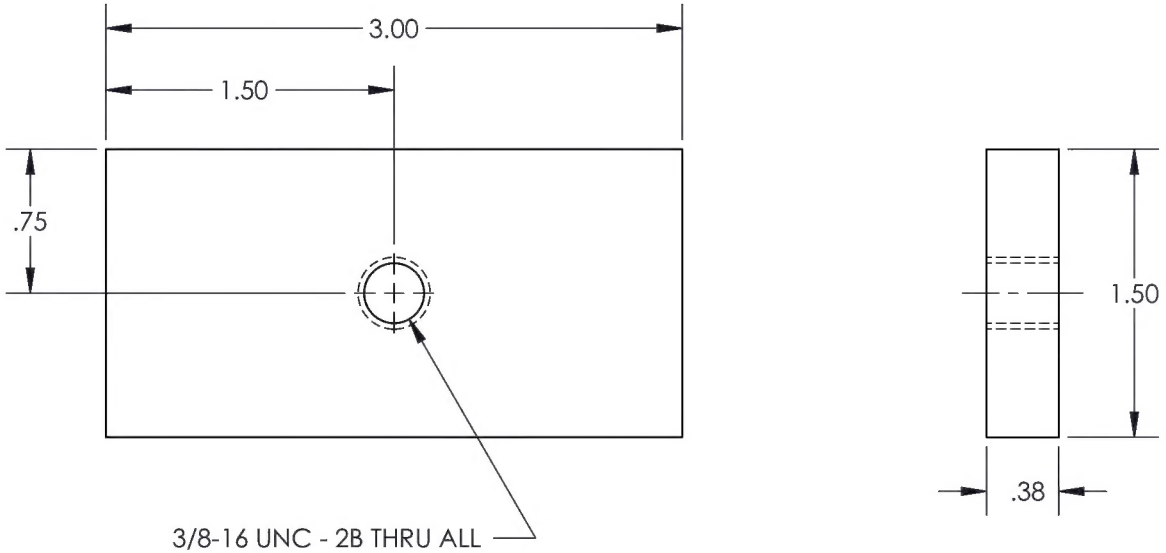
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:4 DATE 5/22/2001 SHEET 6 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-7** CH'D DIM WAS .375 IS .38.	11/6/2015	DPD	JAG





-7

END PLATE

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-7 REV 14

MAT'L	A36/1018/1020 HR
HEAT TREAT	
FINISH	SEE -14 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

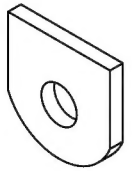
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

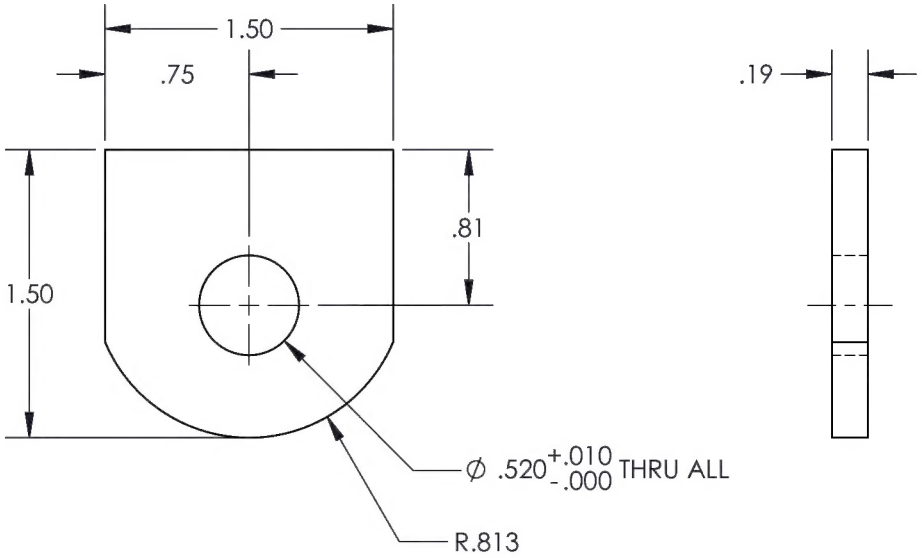
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:1 | DATE 5/22/2001 | SHEET 7 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-9** CH'D DIMS WAS Ø.500 IS Ø.520 +.010 -.000, WAS .188 IS .19.	11/6/2015	DPD	JAG





(-9)

PIVOT TABS

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-9 REV 14

MAT'L	1018/1020 CR
HEAT TREAT	
FINISH	SEE -14 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

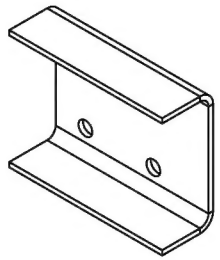
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

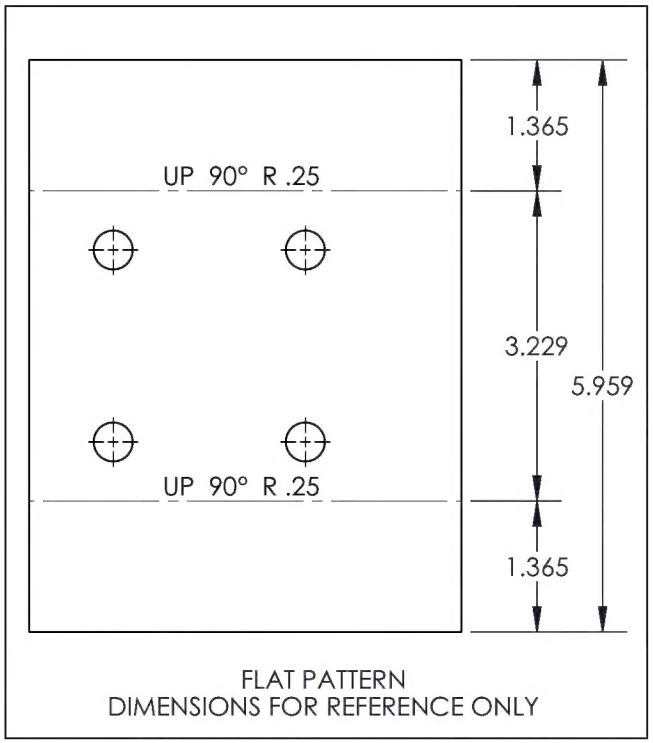
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

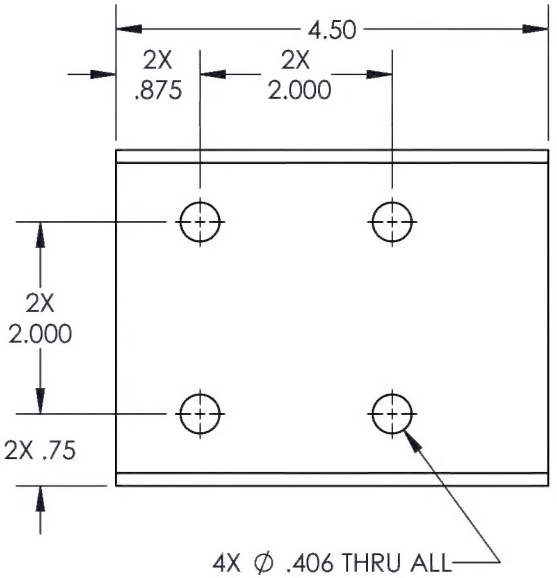
SCALE 1:1 | DATE 5/22/2001 | SHEET 8 OF 37

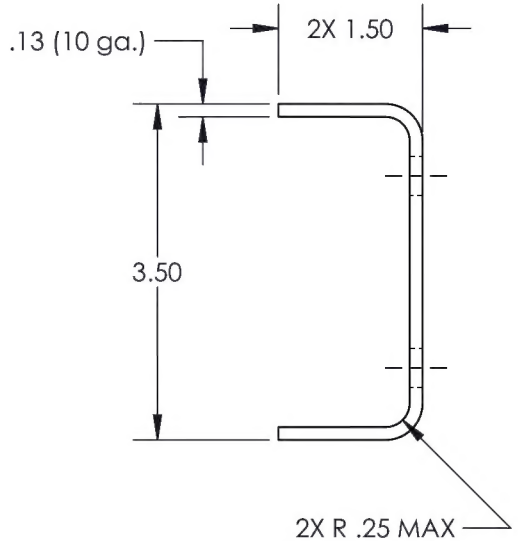
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-11** CH'D DIMS WAS 4X Ø.375 IS 4X Ø.406, WAS R MIN IS 2X R.25 MAX, WAS 10ga IS .13(10ga).	11/6/2015	DPD	JAG





FLAT PATTERN
DIMENSIONS FOR REFERENCE ONLY





-11

CRADLE MOUNT

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-11 REV 14

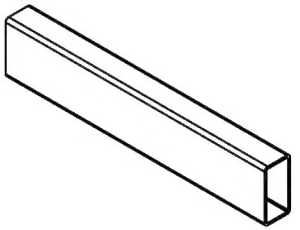
MAT'L	1018/1020 CR
HEAT TREAT	
FINISH	SEE -14 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

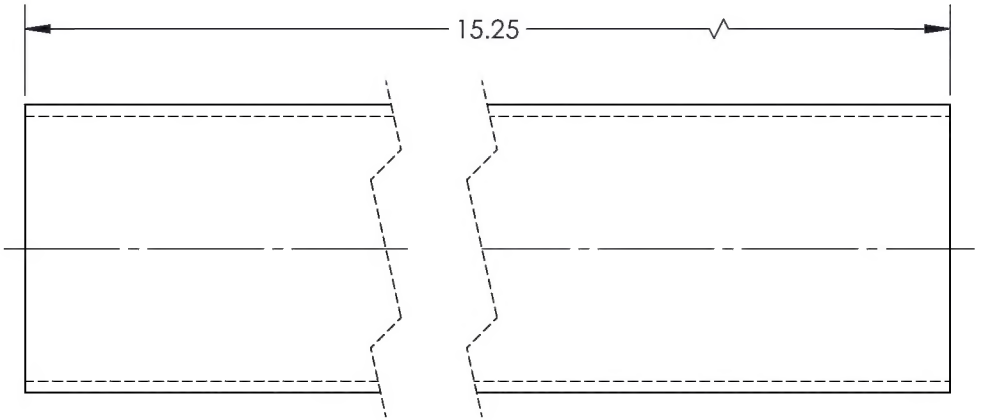
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

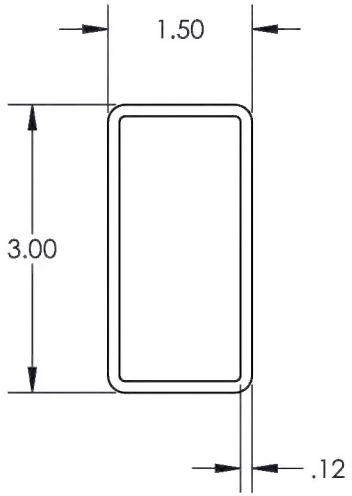
USED ON MODEL: SHWEIZER 330

SCALE 1:2 DATE 5/22/2001 SHEET 9 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-13** CH'D DIM WAS (.120) IS .12.	11/6/2015	DPD	JAG







-13

CROSS TUBE

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-13 REV 14

MAT'L	STEEL TUBE
HEAT TREAT	
FINISH	SEE -14 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

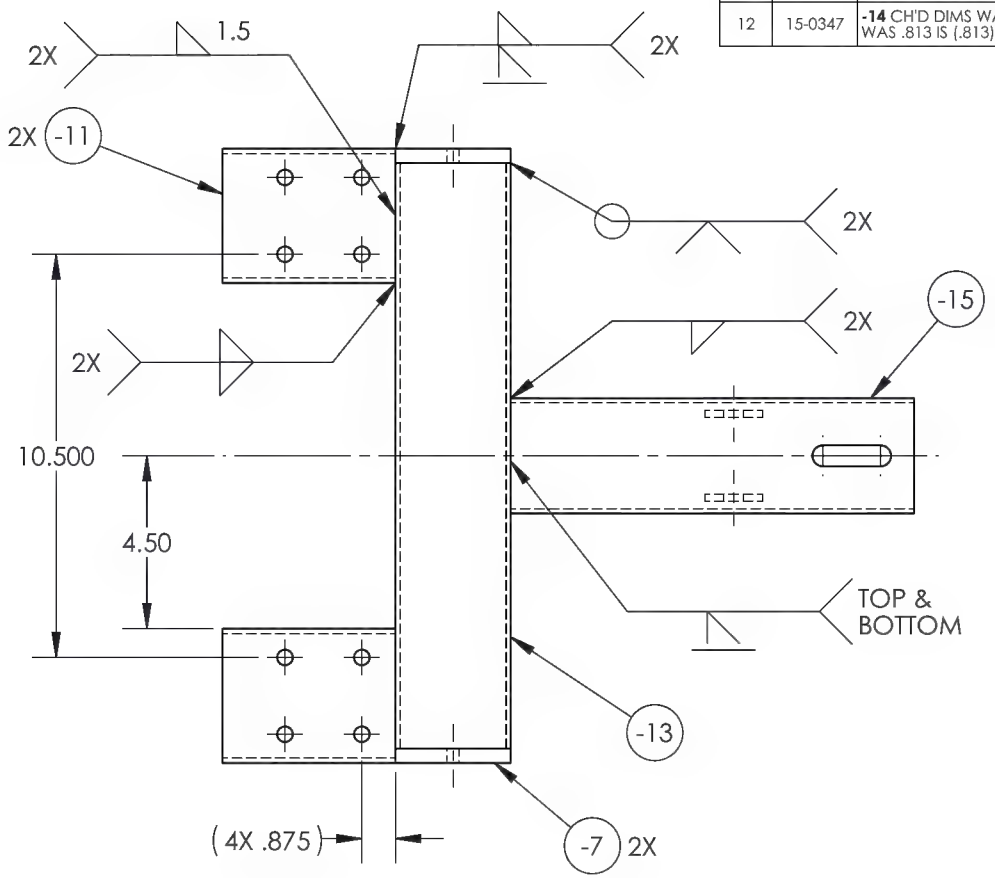
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125√

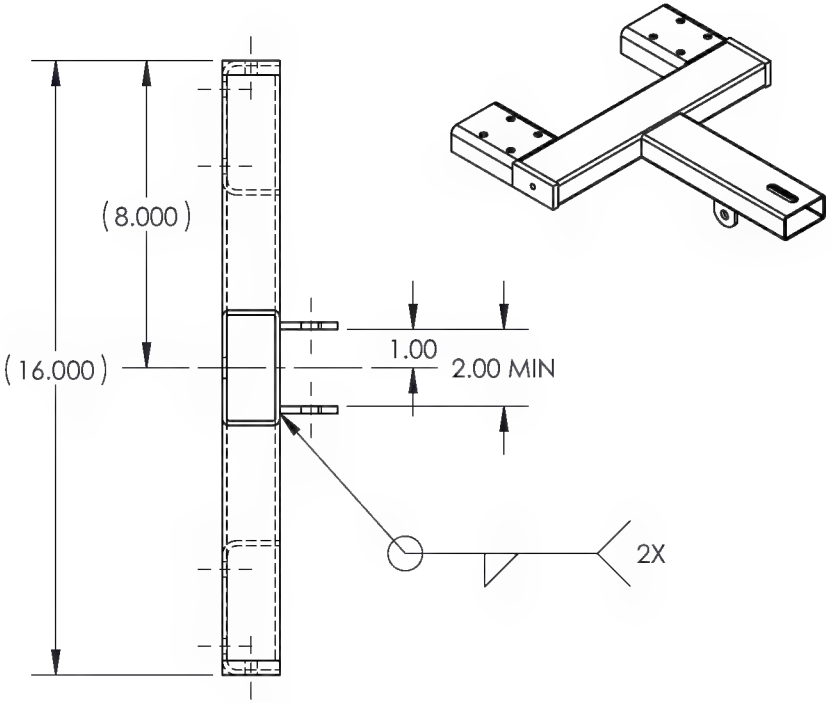
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:2 DATE 5/22/2001 SHEET 10 OF 37

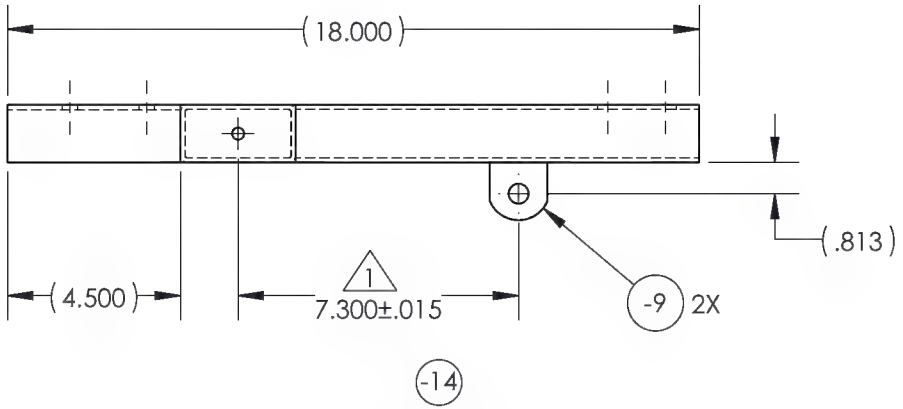
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
9		ADDED -14 MISSING 10.50 DIM BETWEEN HOLES ON -11 MOUNTS & CH'D SOME TOLERANCES PER G.E	12/1/2011	RJC	GE
10		CH'D -14 DIM FROM 7.3 TO 7.3±.015 AND ADDED NOTE PER S.E.	5/7/2012	RJC	SE
12	15-0347	**-14** CH'D DIMS WAS 8.0 IS (8.000), WAS 16.0 IS (16.000), WAS 18.0 IS (18.000), WAS 4.500 IS (4.500), WAS .813 IS (.813), WAS 4X .875 IS (4X .875). DELETED DIM 5.1.	11/6/2015	DPD	JAG





NOTE:

1. USE RBT18640-101-A AS ALIGNMENT FIXTURE FOR WELDING -9.



-14

CARRIAGE WELDMENT

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-14 REV 14

MAT'L	
HEAT TREAT	
FINISH	POWDER COAT WHITE
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

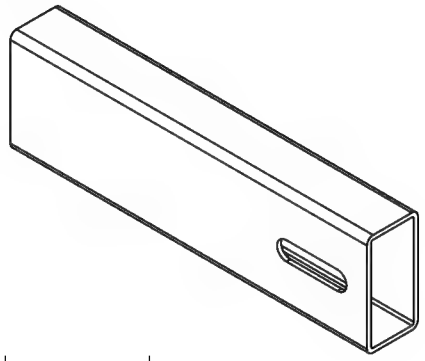
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

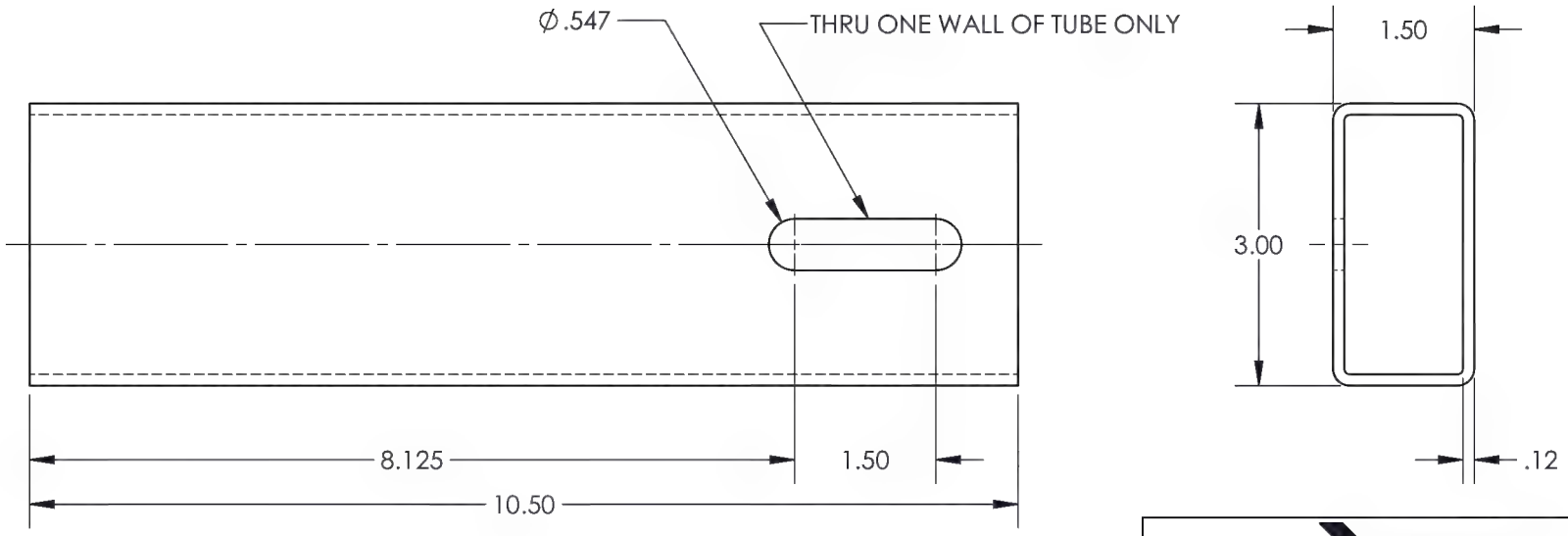
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:5 DATE 5/22/2001 SHEET 11 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		-15 SLOT LENGTHENED TO ALLOW FOR GREATER ADJUSTMENT.	2/22/2002		
12	15-0347	**-15** CH'D DIMS WAS Ø.500 IS Ø.547, WAS 8.875 IS 8.125, WAS 2.00 IS 1.50, WAS (.120) IS .12..	11/6/2015	DPD	JAG





-15

TUBE

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-15 REV 14

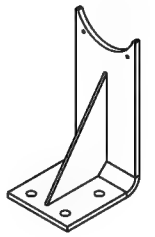
MAT'L	STEEL TUBE
HEAT TREAT	
FINISH	SEE -14 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

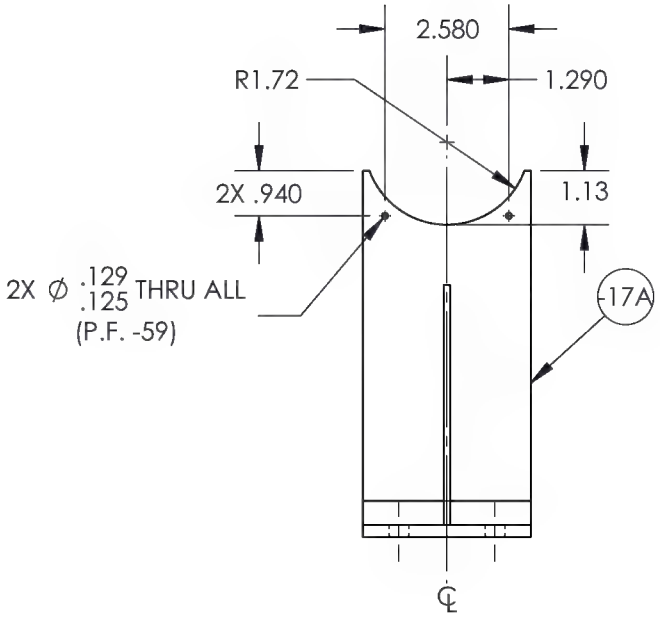
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

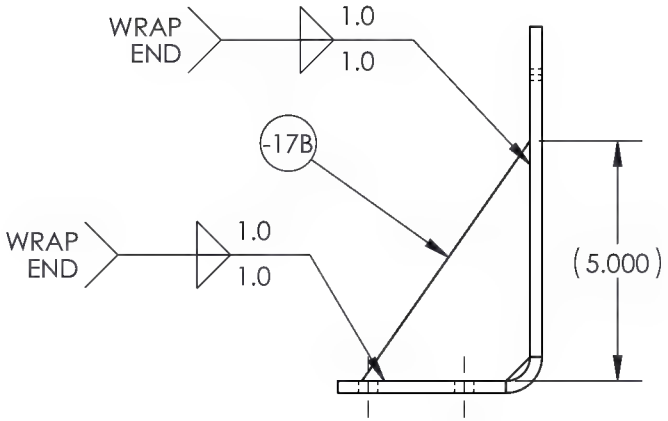
USED ON MODEL: SHWEIZER 330

SCALE 1:2 DATE 5/22/2001 SHEET 12 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-17** ADDED DIM (5.000).	11/6/2015	DPD	JAG
14	17-0043	**-17** ADDED DIM'S R1.72, 1.290, 2.580, 1.13, 2X .940, 2X Ø.129/.125 THRU ALL (P.F. -59).	2/13/2017	RJC	JAG







-17

CRADLE WELDMENT

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-17 REV 14

MAT'L	
HEAT TREAT	
FINISH	POWDER COAT WHITE
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

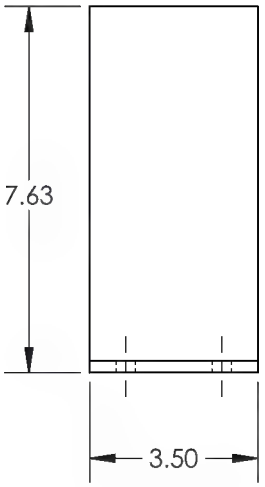
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

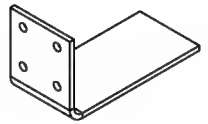
USED ON MODEL: SHWEIZER 330

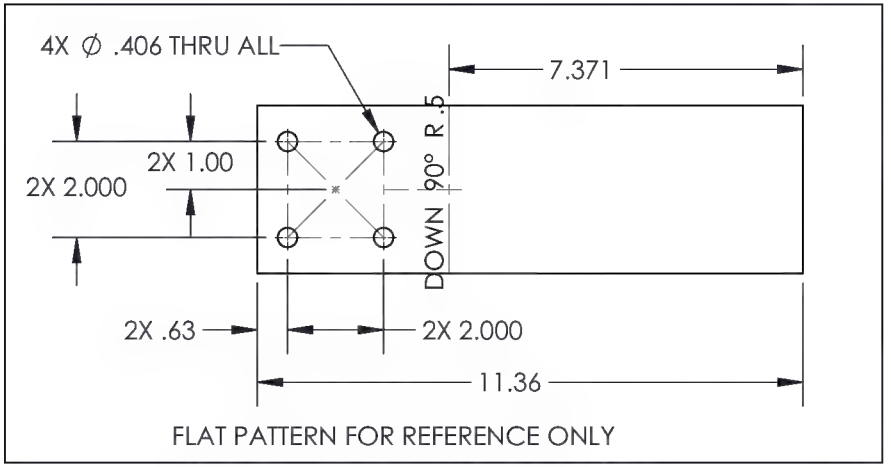
SCALE 1:4 DATE 5/22/2001 SHEET 13 OF 37

REVISIONS

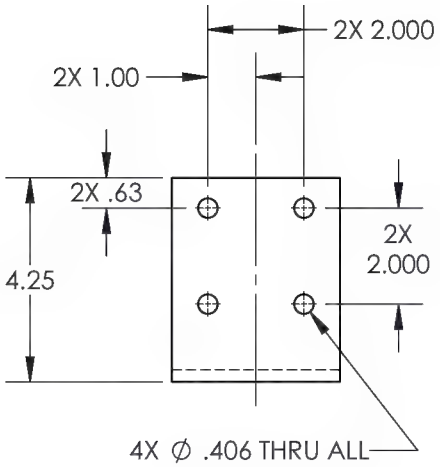
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-17A** MOVED Ø.125 HOLES TO **-18** ASSY. CH'D DIM WAS 4X Ø.375 IS 4X Ø.406.	11/6/2015	DPD	JAG
13	16-0203	**-17A** CH'D MATERIAL WAS A709 GRADE 36 IS A36/1018/1020 HR.	11/1/2016	RJC	JAG
14	17-0043	**-17A** DELETED DIM'S 1.13, 6.50 R1.72, ADDED DIM 7.63.	2/13/2017	RJC	JAG

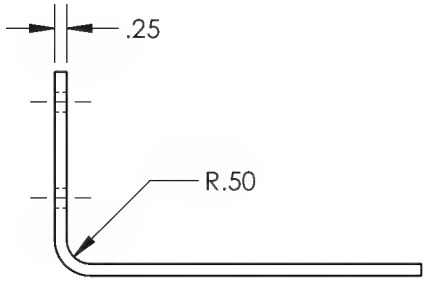






FLAT PATTERN FOR REFERENCE ONLY





-17A

CRADLE ARM

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-17A REV 14

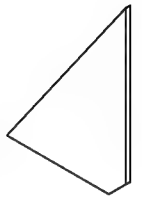
MAT'L	A36/1018/1020 HR
HEAT TREAT	
FINISH	SEE -17 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

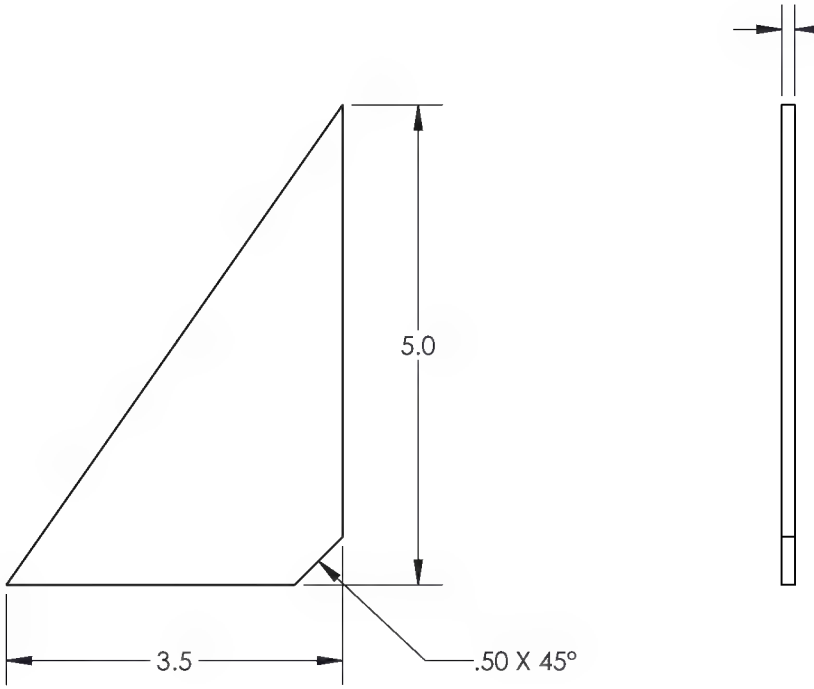
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:4 DATE 5/22/2001 SHEET 14 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-17B** CH'D DIM WAS 10ga IS .13(10ga).	11/6/2015	DPD	JAG
13	16-0203	**-17B** CH'D MATERIAL WAS 1018/1020 CR IS A36/1018/1020 HR.	11/1/2016	RJC	JAG





-17B

CRADLE ARM GUSSET

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-17B REV 14

MAT'L	A36/1018/1020 HR
HEAT TREAT	
FINISH	SEE -17 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

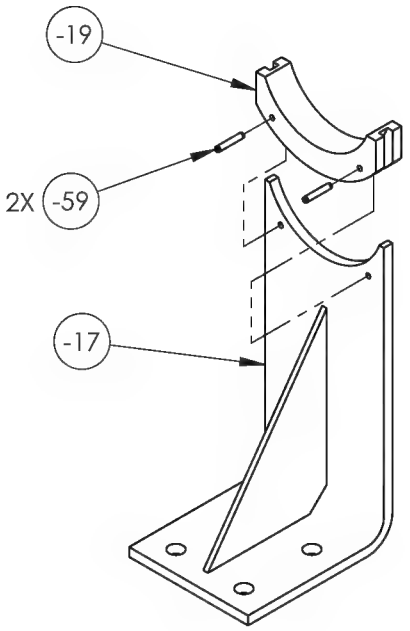
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:2 DATE 5/22/2001 SHEET 15 OF 37

REVISIONS

REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-18** ADDED DIM 2X Ø.125-.129. ADDED TEMPLATE NOTE.	11/6/2015	DPD	JAG
13	16-0203	**-18** CORRECTED P/N WAS -17A IS -17.	11/1/2016	RJC	JAG
14	17-0043	**-18** DELETED FRONT VIEW WITH 2X Ø.129/.125 THRU ALL ⚠. DELETED NOTE ⚠.	2/13/2017	RJC	JAG



-18

CRADLE ARM ASSEMBLY

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-18 REV 14

MAT'L	
HEAT TREAT	
FINISH	
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

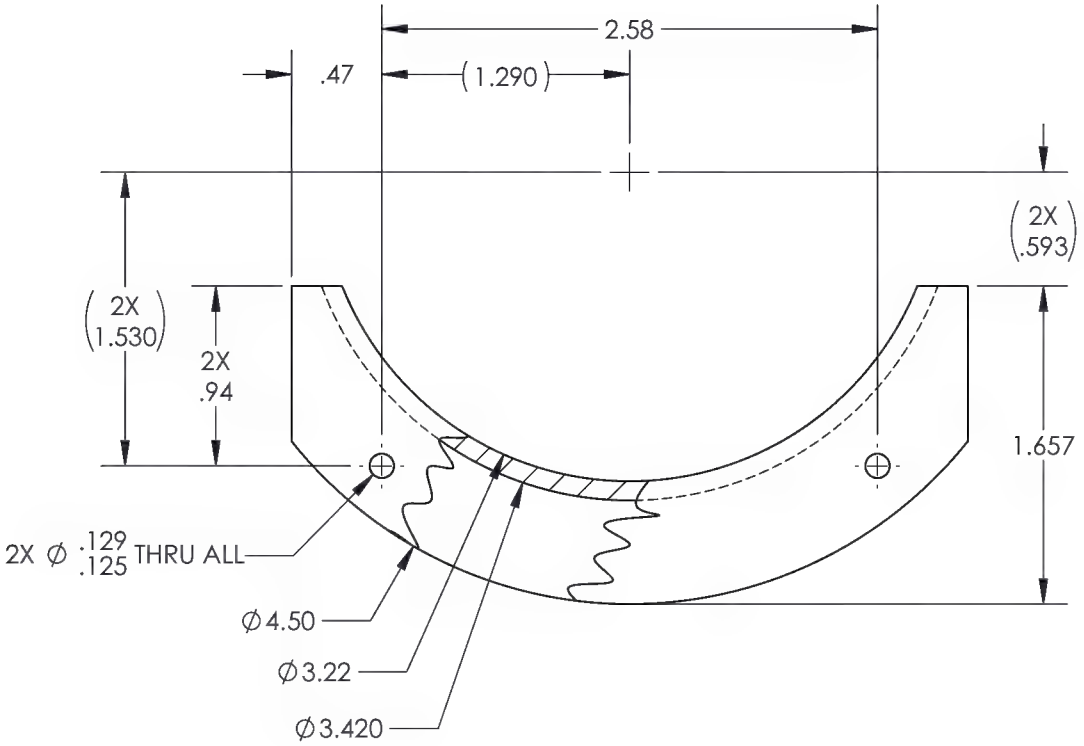
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

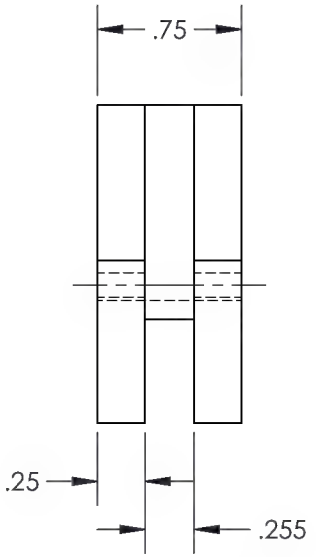
USED ON MODEL: SHWEIZER 330

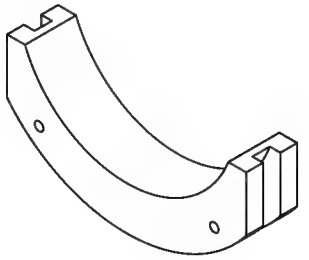
SCALE 1:2 DATE 5/22/2001 SHEET 16 OF 37

REVISIONS

REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		-19 RADIUS INCREASE TO Ø3.220 FOR BETTER FIT ON ENGINE.	2/22/2002		
8		CH'D -19 DIM .125 TO 1.19.	5/12/2009	WP	
12	15-0347	**-19** CH'D DIMS WAS 2X 1.53 IS (2X 1.530), WAS 2X 1.29 IS (1.290), WAS 2X Ø.125 IS 2X Ø.125-129. ADDED DIMS 2X .94, (2X .593), 2.58, .47.	11/6/2015	DPD	JAG
13	16-0203	**-19** CH'D MATERIAL WAS BLACK UHMW IS DELRIN/ACETAL.	11/1/2016	RJC	JAG







-19

CRADLE PAD

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-19 REV 14

MAT'L	DELRIN/ACETAL
HEAT TREAT	
FINISH	
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

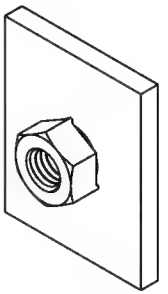
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

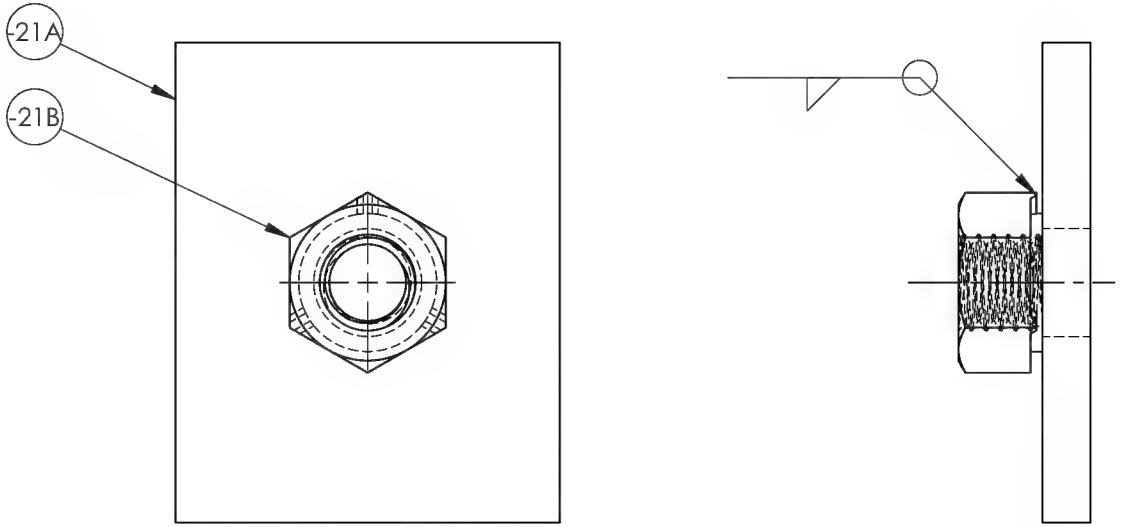
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:1 | DATE 5/22/2001 | SHEET 17 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-21** ADDED CENTER NOTE.	11/6/2015	DPD	JAG





NOTE:
CENTER -21B WELDNUT ON HOLE OF -21A PLATE.

DART AEROSPACE

TITLE	ENGINE LIFT ASSEMBLY
DWG NO.	269T3301-21
REV	14
MAT'L	
HEAT TREAT	
FINISH	BLACK ZINC
SPEC	ASTM B633 TYPE II SC 2
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
SCALE	1:1
DATE	5/22/2001
SHEET	SHEET 18 OF 37

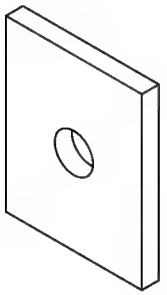
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

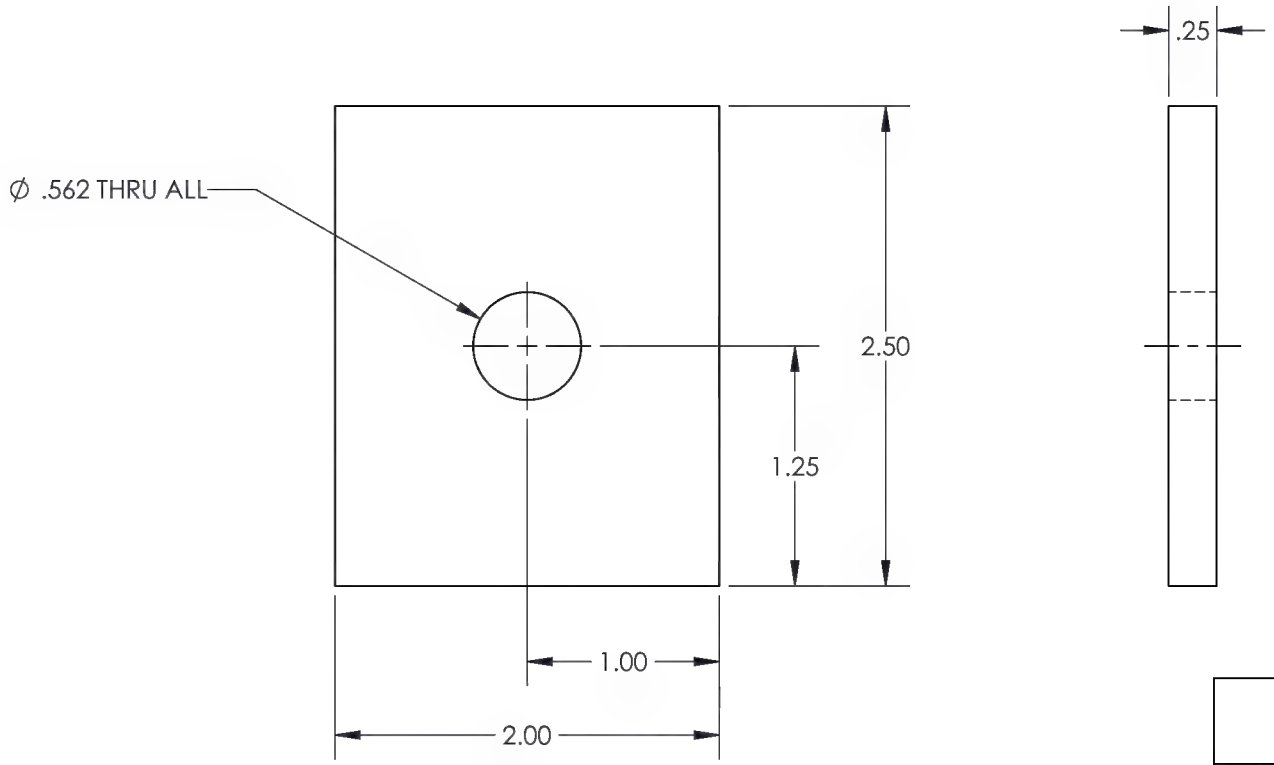
USED ON MODEL
SHWEIZER 330

(-21)

NUT PLATE WELDMENT

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED





-21A

PLATE

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-21A REV 14

MAT'L	A36/1018/1020 HR
HEAT TREAT	
FINISH	SEE -21 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

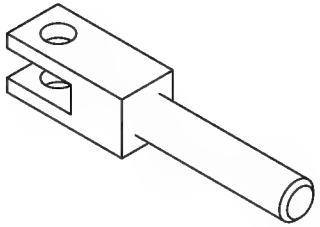
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

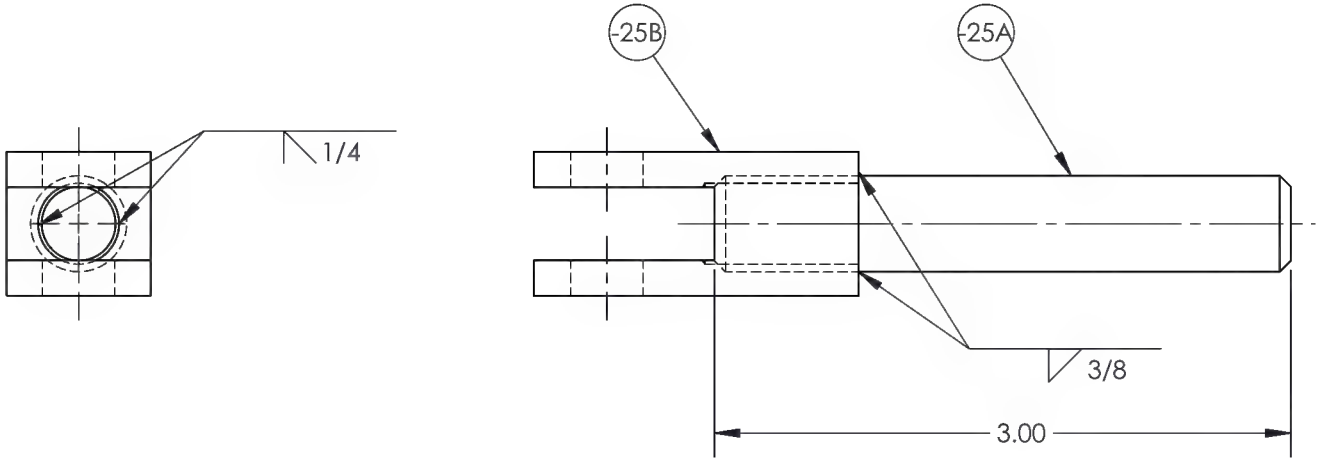
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:1 | DATE 5/22/2001 | SHEET 19 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED





-25

STUD WELDMENT

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-25 REV 14

MAT'L	
HEAT TREAT	
FINISH	BLACK ZINC
SPEC	ASTM B633 TYPE II SC 2
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

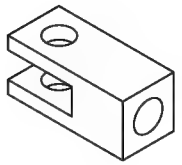
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

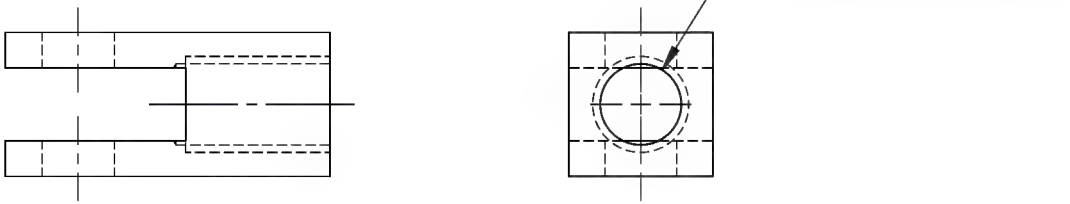
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:1 | DATE 5/22/2001 | SHEET 20 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED





-25B

TAPPED CLEVIS YOKE

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-25B | REV 14

MAT'L	STEEL
HEAT TREAT	
FINISH	SEE -25 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
SCALE	1:1
DATE	5/22/2001

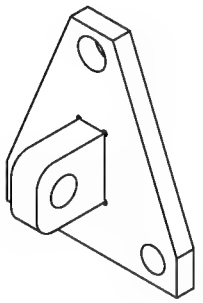
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

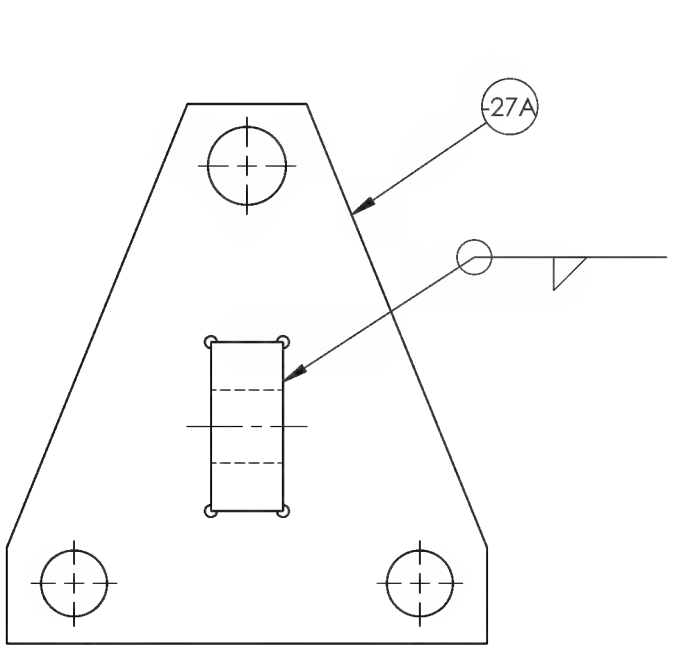
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

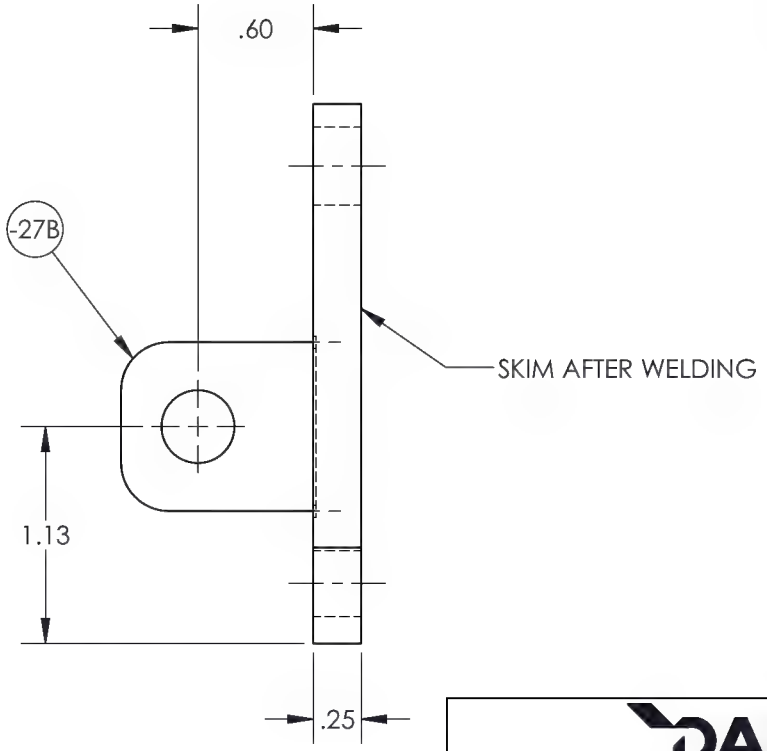
USED ON MODEL: SHWEIZER 330

SHEET 21 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-27** CH'D DIM WAS .250 IS .25.	11/6/2015	DPD	JAG







-27

FRONT ENGINE MOUNT WELDMENT

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-27 REV 14

MAT'L	
HEAT TREAT	
FINISH	BLACK ZINC
SPEC	ASTM B633 TYPE II SC 2
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

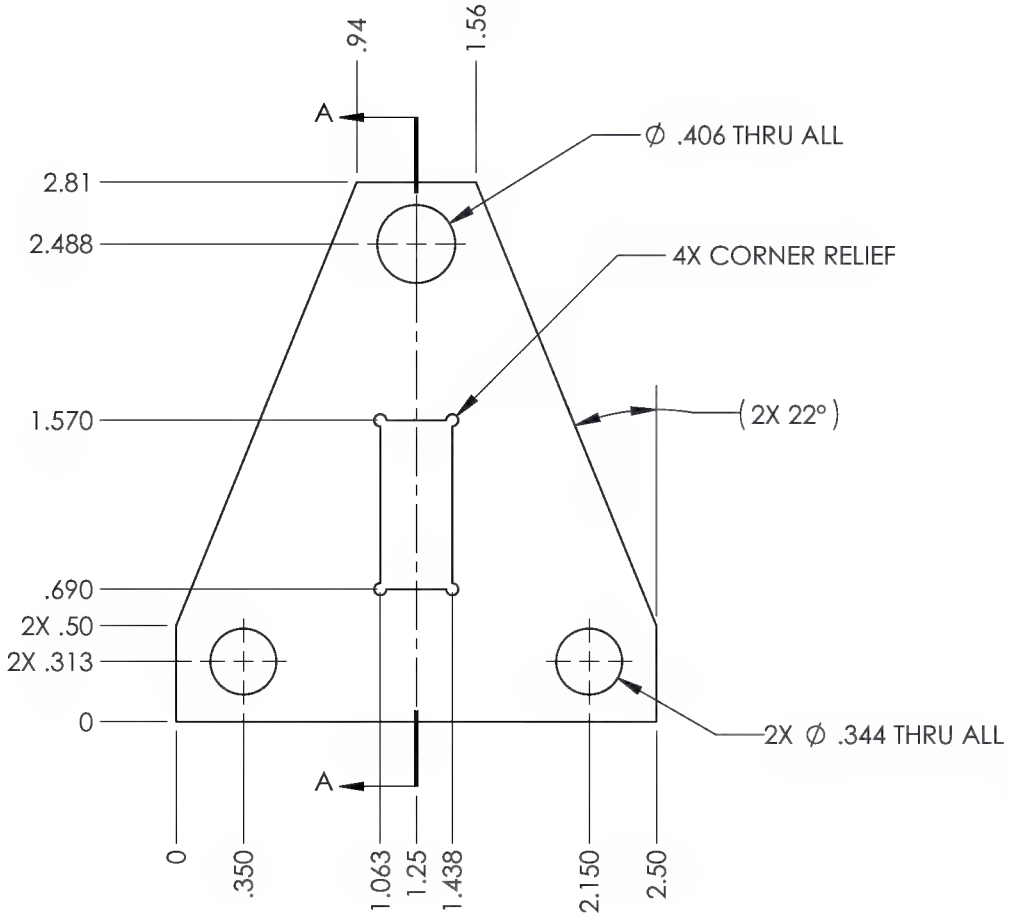
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

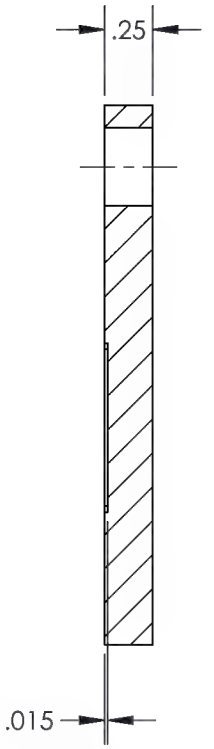
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

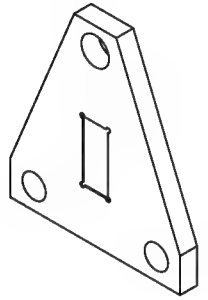
SCALE 1:1 DATE 5/22/2001 SHEET 22 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
11		-27A ADDED NESTING POCKET TO PART.	3/29/2013	BIM	GE
12	15-0347	**-27A** DELETED DIMS 4X .063, 1.130. CH'D DIM WAS 22° IS (22°). ADDED 4X CORNER RELIEF NOTE.	11/6/2015	DPD	JAG





SECTION A-A



-27A

MOUNT PLATE

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-27A REV 14

MAT'L	A36/1018/1020 HR
HEAT TREAT	
FINISH	SEE -27 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

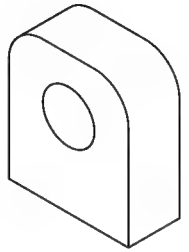
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

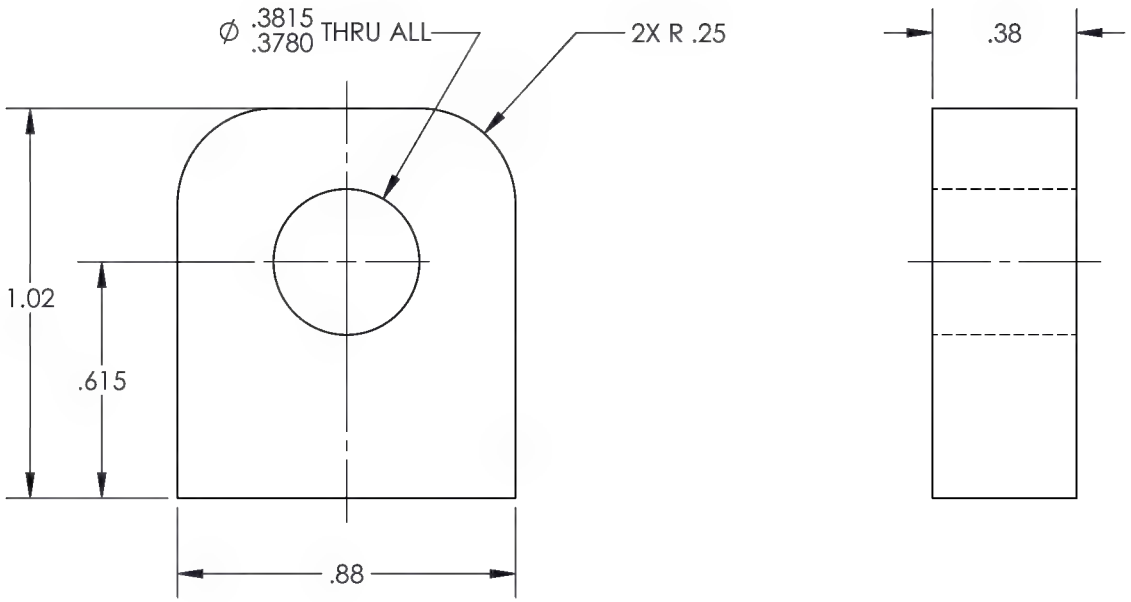
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:1 DATE 5/22/2001 SHEET 23 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
4		CHANGED -27B TAB TO MATE WITH OFF THE SHELF CLEVIS.	6/3/2002		
11		-27B CH'D DIM WAS 1.00 IS 1.015 PER G.E.	3/29/2013	BIM	GE
12	15-0347	**-27B** CH'D DIMS WAS Ø.377 IS Ø.3780-.3815, WAS .60 IS .615, WAS 1.015 IS 1.02.	11/11/2015	DPD	JAG





-27B

TAB

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-27B REV 14

MAT'L	A36/1018/1020 HR
HEAT TREAT	
FINISH	SEE -27 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	
OPPS APPR:	
QA APPR:	
APPROVED:	Not Approved For Mfg
SCALE	2:1
DATE	5/22/2001

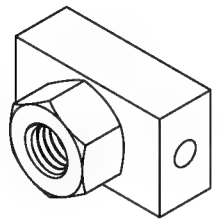
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

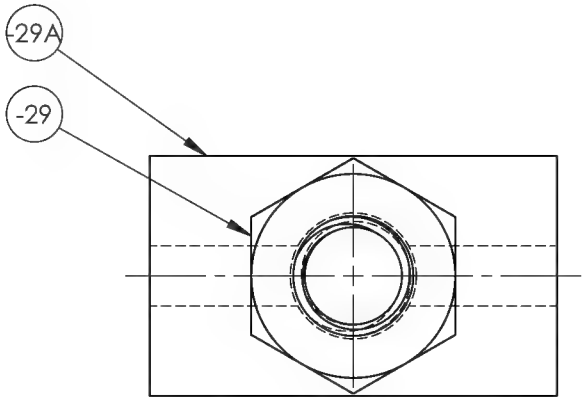
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

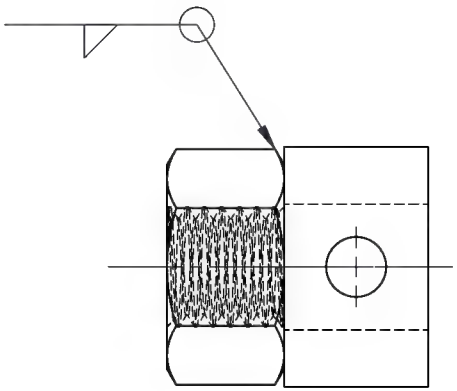
USED ON MODEL: SHWEIZER 330

SHEET 24 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-28** ADDED CENTER NOTE.	11/6/2015	DPD	JAG







NOTE:
CENTER -29 ACME NUT ON HOLE OF -29A REAR PIVOT BLOCK.

(-28)

REAR PIVOT BLOCK WELDMENT

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-28 REV 14

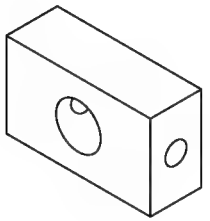
MAT'L	
HEAT TREAT	
FINISH	BLACK ZINC
SPEC	ASTM B633 TYPE II SC 2
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

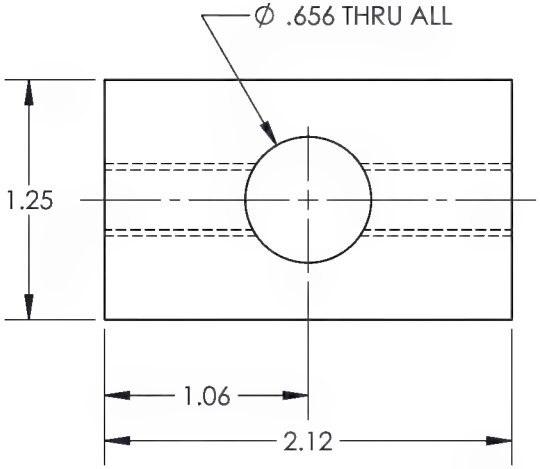
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

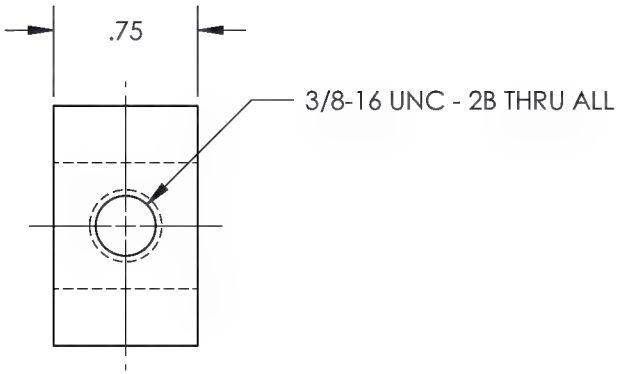
USED ON MODEL: SHWEIZER 330

SCALE 1:1 DATE 5/22/2001 SHEET 25 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED







-29A

REAR PIVOT BLOCK

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-29A REV 14

MAT'L	A36/1018/1020 HR
HEAT TREAT	
FINISH	SEE -28 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

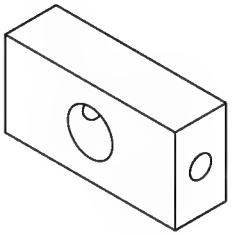
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

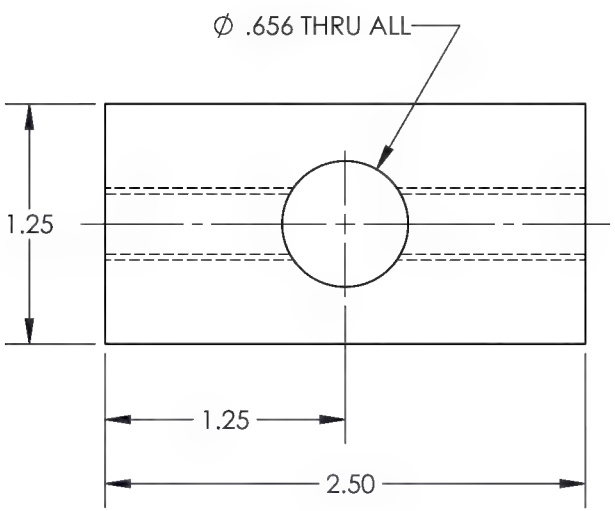
USED ON MODEL: SHWEIZER 330

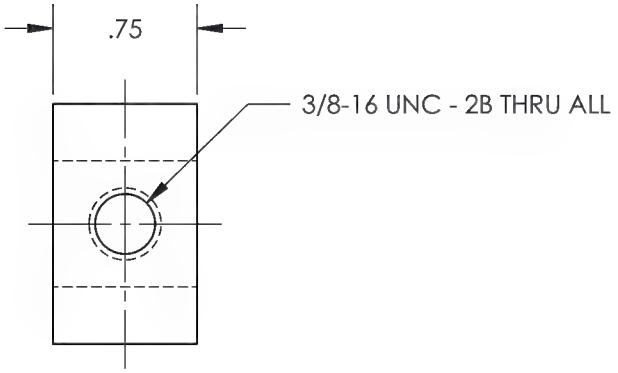
SCALE 1:1 DATE 5/22/2001 SHEET 26 OF 37

REVISIONS

REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
6		ADDED C-BORES TO -29 PIVOT BLOCK.	11/21/2006	WP	
12	15-0347	**-29B** CH'D DIMS WAS 2.75 IS 2.50, WAS 2X 3/8-16 UNC ⌴ Ø.500 ↧.125 IS 3/8-16 UNC-2B.	11/12/2015	DPD	JAG







-29B

FRONT PIVOT BLOCK

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-29B REV 14

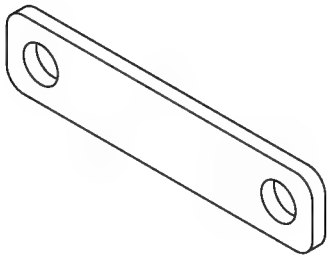
MAT'L	A36/1018/1020 HR
HEAT TREAT	
FINISH	BLACK ZINC
SPEC	ASTM B633 TYPE II SC 2
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

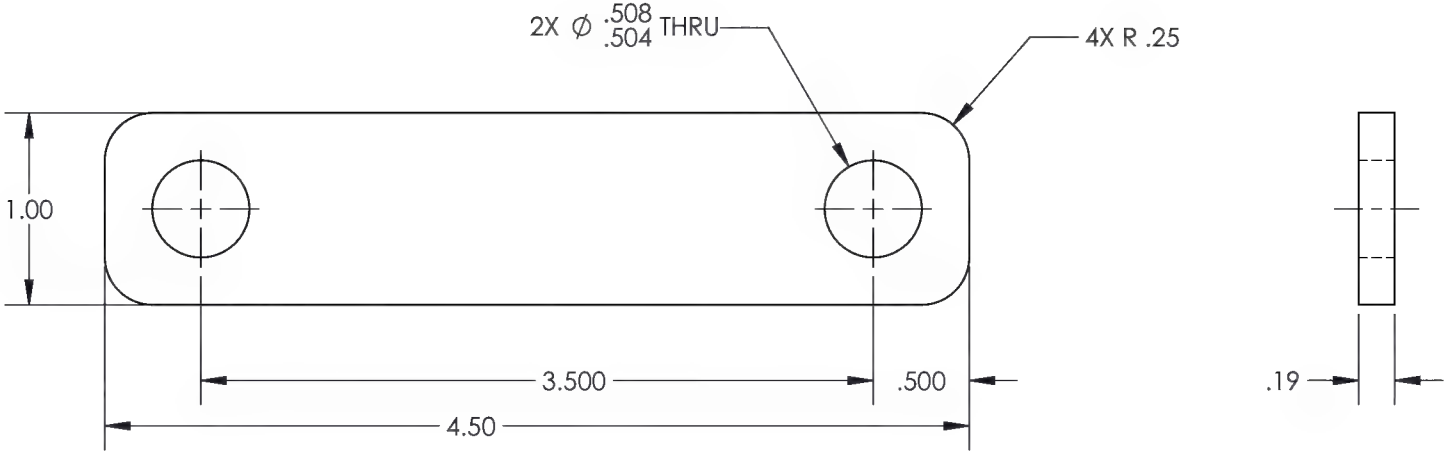
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:1 DATE 5/22/2001 SHEET 27 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-31** CH'D DIMS WAS Ø.500 IS 2X Ø.504-.508, WAS R.25 IS 4X R.25, WAS .188 IS .19.	11/11/2015	DPD	JAG





-31

LINK

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-31 REV 14

MAT'L	A36/1018/1020 HR
HEAT TREAT	
FINISH	BLACK ZINC
SPEC	ASTM B633 TYPE II SC 2
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

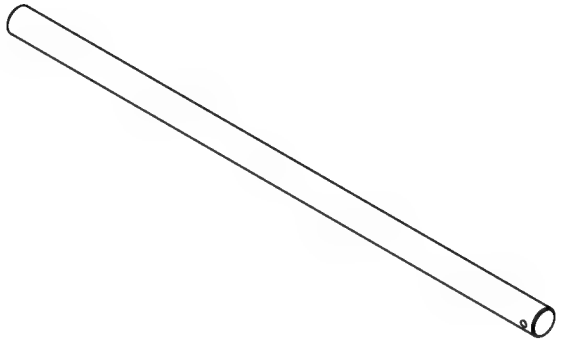
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

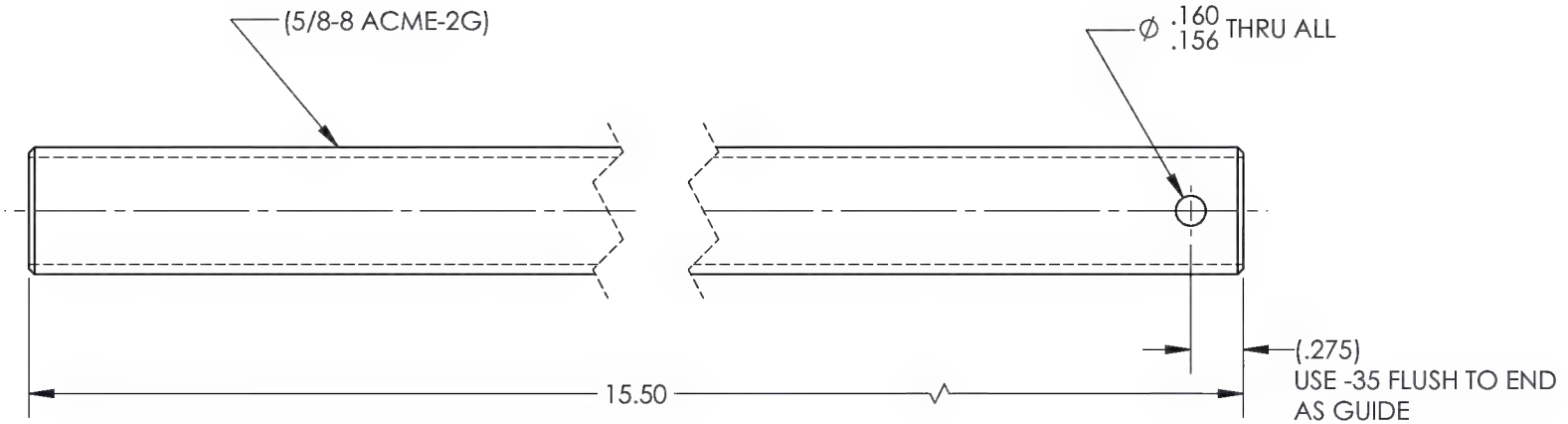
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SCALE 1:1 DATE 5/22/2001 SHEET 28 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-33** CH'D DIM WAS Ø.156 IS Ø.156-.160. ADDED DIM (5/8-8 ACME-2G).	11/11/2015	DPD	JAG





-33

ACME THREADED ROD ROD

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-33 REV 14

MAT'L	S.S.
HEAT TREAT	
FINISH	BLACK ZINC
SPEC	ASTM B633 TYPE II SC 2
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

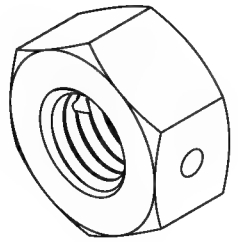
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

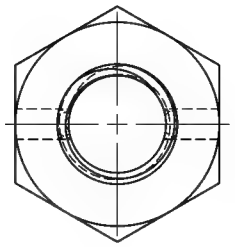
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

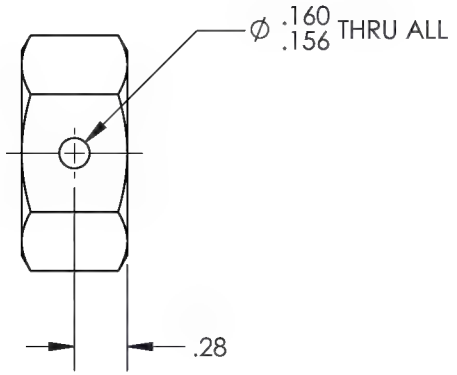
USED ON MODEL: SCHWEIZER

SCALE 1:1 DATE 5/22/2001 SHEET 29 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-35** DELETED FINISH. CH'D DIMS WAS Ø.156 IS Ø.156-.160, WAS (.275) IS .28.	11/11/2015	DPD	JAG







-35

ACME NUT DRILLED FOR ROLL PIN

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-35 REV 14

MAT'L	S.S.
HEAT TREAT	
FINISH	
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

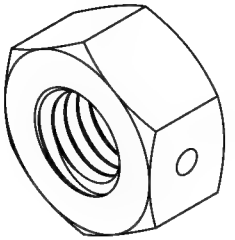
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

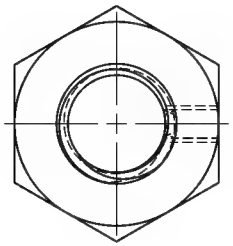
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

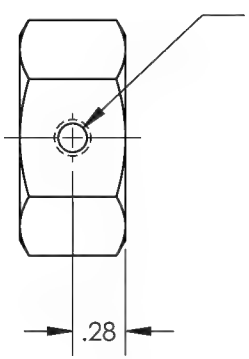
USED ON MODEL: SCHWEIZER 330

SCALE 1:1 | DATE 5/22/2001 | SHEET 30 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-36** DELETED FINISH. CH'D DIMS WAS (.275) IS .28, WAS 10-24 UNC ONE SIDE IS 10-24 UNC-2B ↧ .38.	11/11/2015	DPD	JAG







-36

ACME NUT DRILLED FOR SET SCREW

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-36 REV 14

MAT'L	S.S.
HEAT TREAT	
FINISH	
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

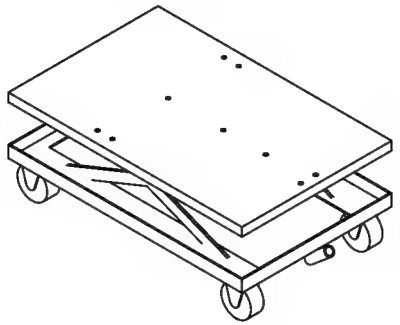
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

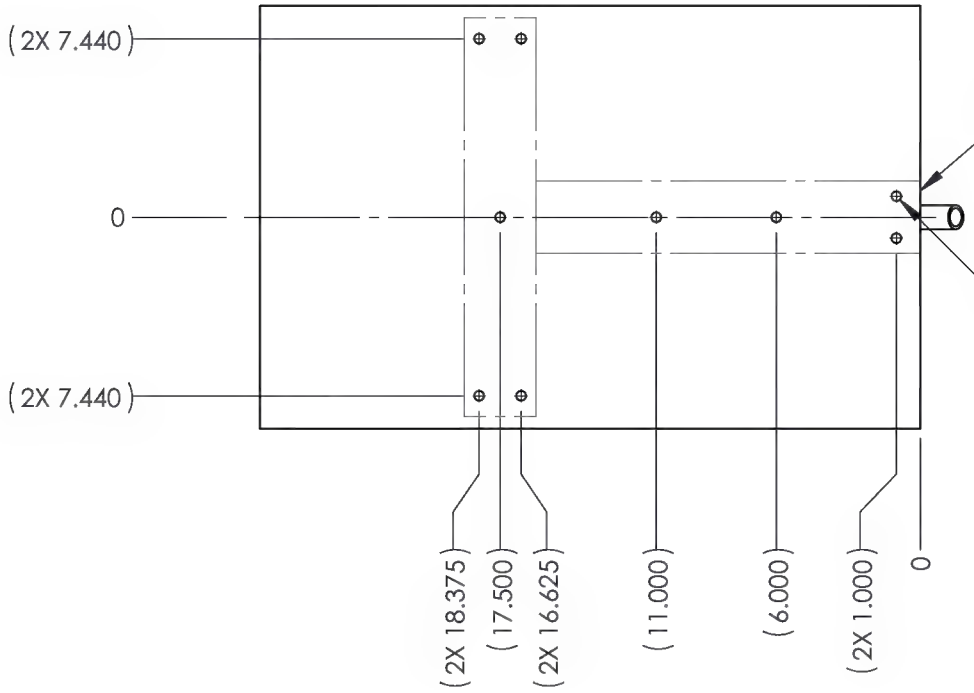
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

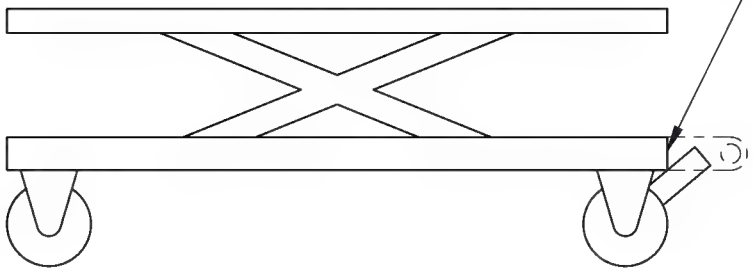
USED ON MODEL: SCHWEIZER 330

SCALE 1:1 | DATE 5/22/2001 | SHEET 31 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
12	15-0347	**-51** ADDED DIMS (2X 7.440), (2X 7.440), (2X 18.375), (17.500), (2X 16.625), (11.000), (6.000), (2X 1.000). ADDED POSITION NOTE.	11/6/2015	DPD	JAG







(-51)

HYDRAULIC LIFT CART ASSEMBLY

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-51 REV 14

MAT'L	
HEAT TREAT	
FINISH	
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

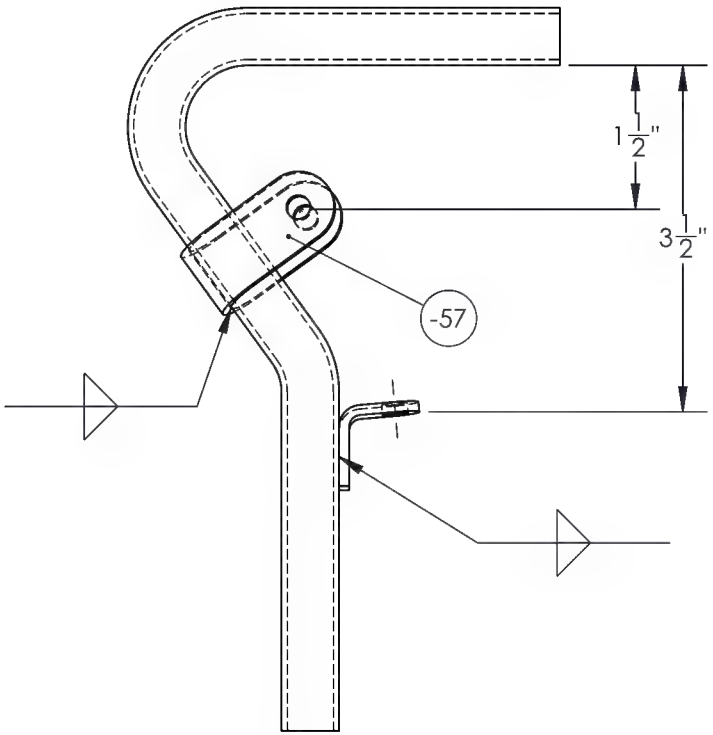
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

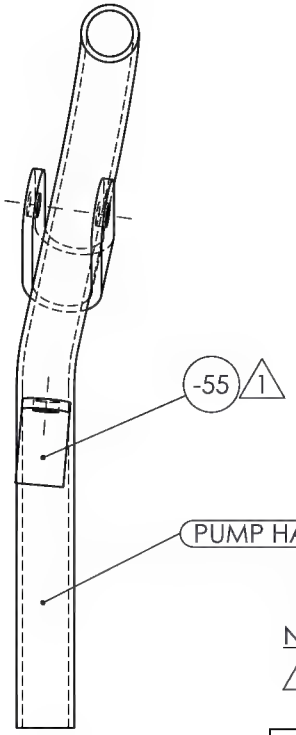
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

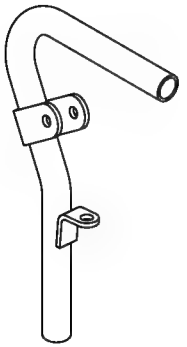
USED ON MODEL: SHWEIZER 330

SCALE 1:8 DATE 5/22/2001 SHEET 32 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
6		ADDED -53 DWG TO FILE FROM HAND PRINT.	11/21/2006	WP	







NOTE:

1. CABLE STOP TO MATCH CENTER OF PRESSURE RELEASE HANDLE.

-53

PUMP HANDLE WELDMENT

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-53 REV 14

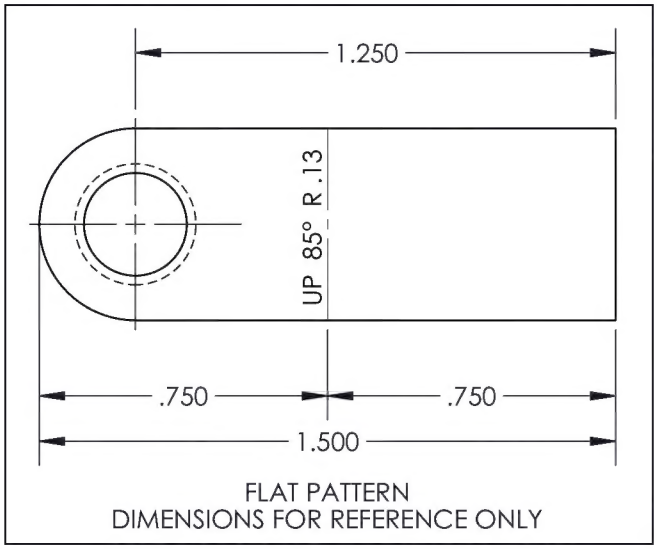
MAT'L	
HEAT TREAT	
FINISH	BLACK ZINC
SPEC	ASTM B633 TYPE II SC 2
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

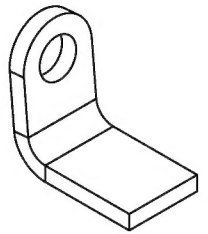
USED ON MODEL: SHWEIZER 330

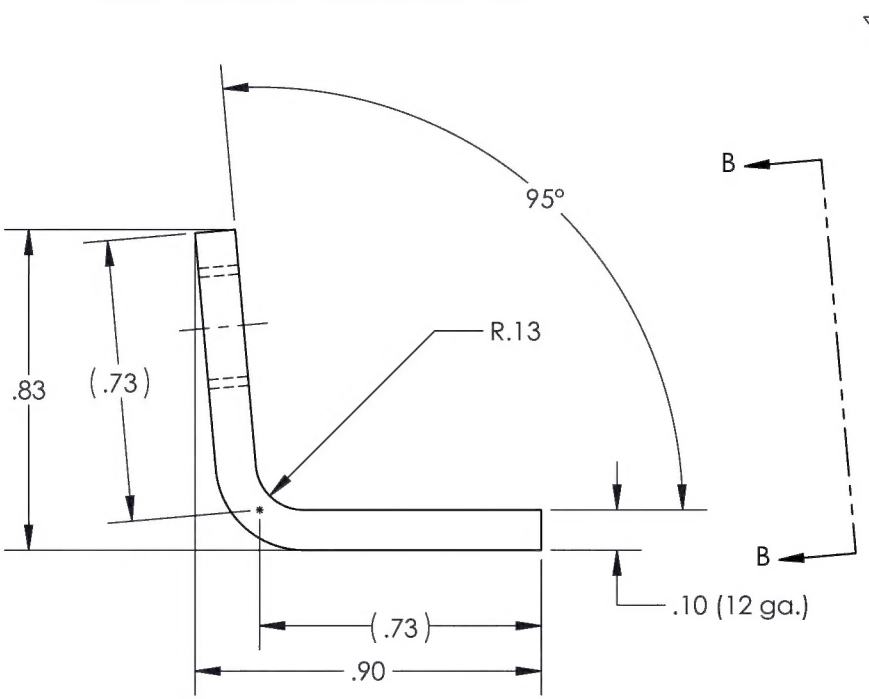
SCALE 1:2 DATE 5/22/2001 SHEET 33 OF 37

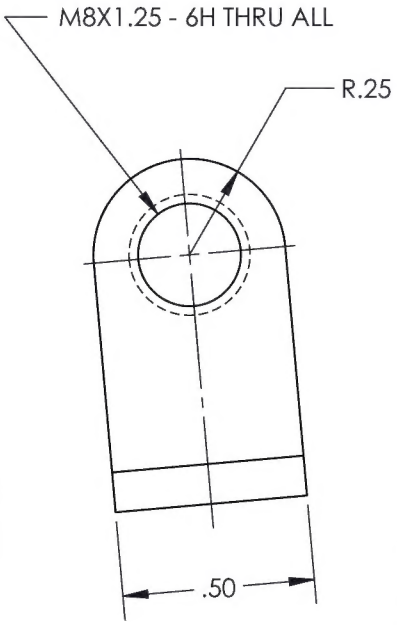
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
6		ADDED -55 DWG TO FILE FROM HAND PRINTS.	11/21/2006	WP	
12	15-0347	**-55** ADDED DIMS R.13, .83, .90, (.73), (.73).	11/11/2015	DPD	JAG



FLAT PATTERN
DIMENSIONS FOR REFERENCE ONLY







VIEW B-B

-55

CABLE STOP

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-55 REV 14

MAT'L	1018/1020 CR
HEAT TREAT	
FINISH	SEE -53 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT

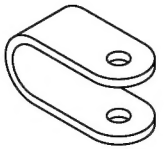
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

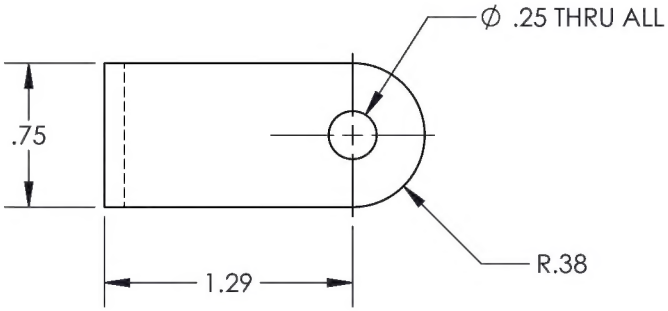
USED ON MODEL: SHWEIZER 330

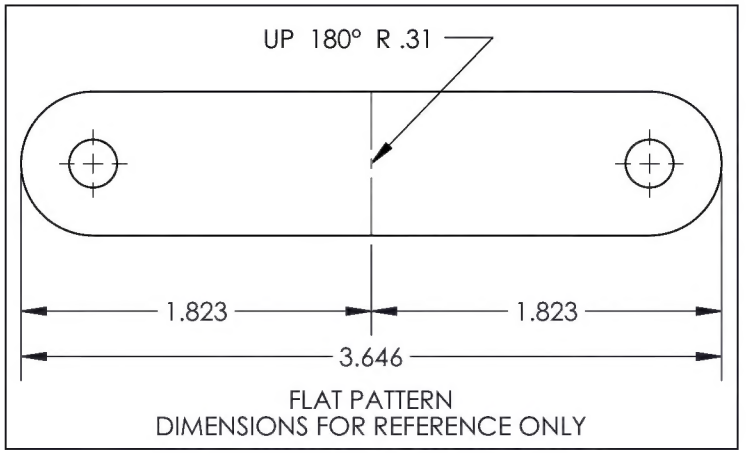
SCALE 2:1 DATE 5/22/2001 SHEET 34 OF 37

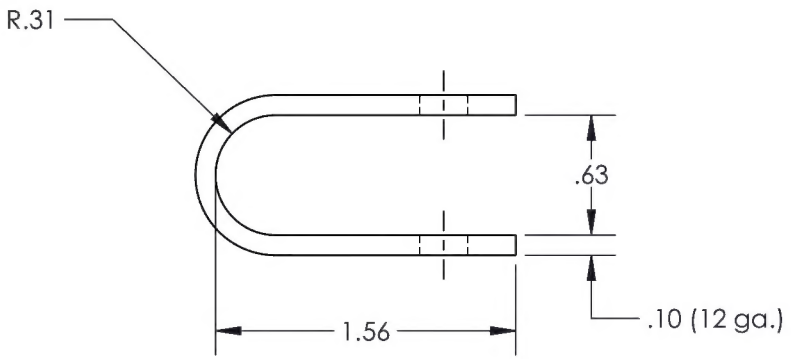
REVISIONS

REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
6		ADDED -57 DWG TO FILE FROM HAND PRINTS.	11/21/2006	WP	
12	15-0347	**-57** DELETED DIMS 1-1/8, 1-1/4. ADDED DIMS 1.56, 1.29. CH'D DIMS WAS R3/8 IS R.38, WAS R5/16 IS R.31.	11/11/2015	DPD	JAG









-57

RELEASE HANDLE PIVOT

DART AEROSPACE

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301-57 REV 14

MAT'L	1018/1020 CR
HEAT TREAT	
FINISH	SEE -53 WELDMENT
SPEC	
DRAWN BY:	COLE
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
SCALE	1:1
DATE	5/22/2001

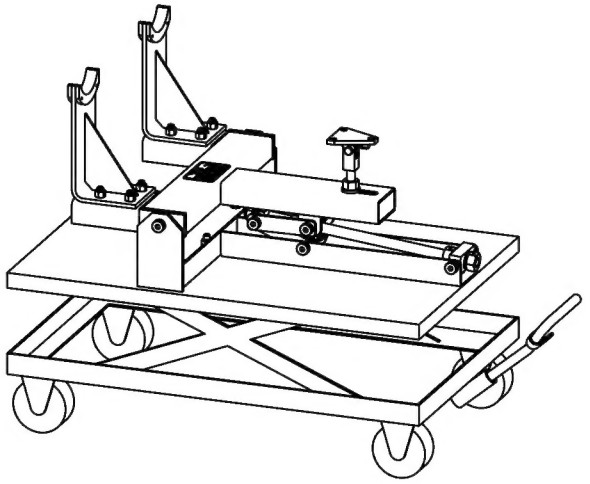
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
.XXX ± .010 FRACTIONS ± 1/8
.XX ± .03 ANGLES ±1°
.X ± .1 SURFACES = 125

1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL: SHWEIZER 330

SHEET 35 OF 37

ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	Part #	UNIT QTY	Description	Material
							X	-2	1	BASE WELDMENT	
						X		-14	1	CARRIAGE WELDMENT	
					X			-18	2	CRADLE ARM ASSEMBLY	
					1			-19		CRADLE PAD	DELRIN/ACETAL
				X				-21	1	NUT PLATE WELDMENT	
								-22	1	CLEVIS PIN	S.S.
								-23	1	FLANGE NUT	S.S.
								-24	1	HAIR PIN	S.S.
			X					-25	1	STUD WELDMENT	
		X						-27	1	FRONT ENGINE MOUNT WELDMENT	
	X							-28	1	REAR PIVOT BLOCK WELDMENT	
								-29B	1	FRONT PIVOT BLOCK	A36/1018/1020 HR
								-31	4	LINK	A36/1018/1020 HR
								-33	1	ACME THREADED ROD ROD	S.S.
								-35	1	ACME NUT DRILLED FOR ROLL PIN	S.S.
								-36	2	ACME NUT DRILLED FOR SET SCREW	S.S.
								-37	2	THRUST BEARING	STEEL
								-39	4	THRUST BEARING RACE	STEEL
								-40	1	ROLL PIN	S.S.
								-41	2	SOCKET HEAD SET SCREWS	S.S.
								-43	6	SOCKET HEAD SHOULDER BOLTS	S.S.
								-44	4	SOCKET HEAD SHOULDER BOLTS	S.S.
								-45	21	NYLOCK NUTS	S.S.
								-46	24	MACHINE BUSHING WASHERS	S.S.
								-47	17	HEX HEAD CAP SCREWS	S.S.
								-49	8	FLAT WASHERS	S.S.
								-51	1	HYDRAULIC LIFT CART ASSEMBLY	
X								-53	1	PUMP HANDLE WELDMENT	
					2			-59		ROLL PIN	S.S.
									1	PLACARD	ALUMINUM
ASSY -53	ASSY -28	ASSY -27	ASSY -25	ASSY -21	ASSY -18	ASSY -14	ASSY -2				



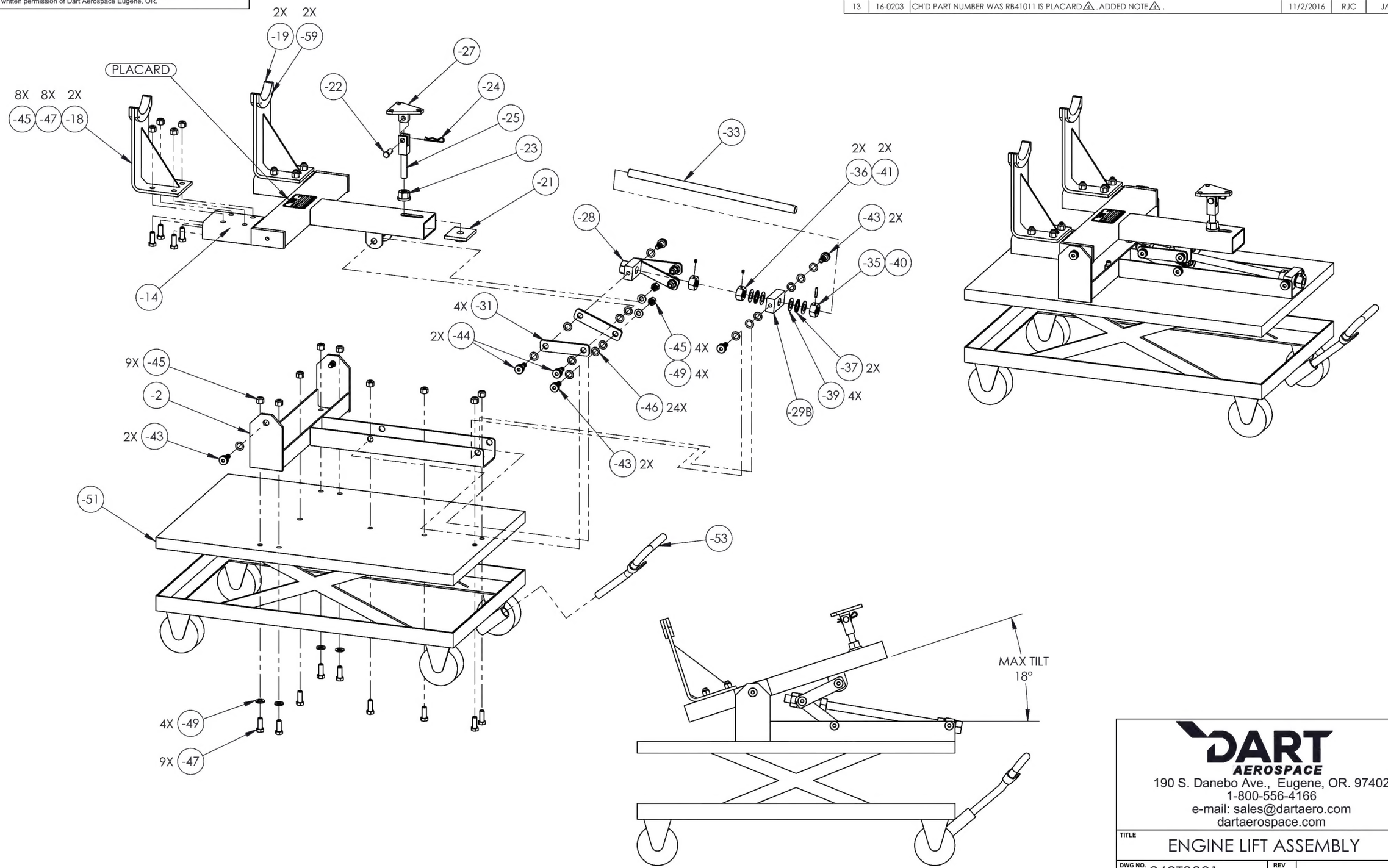
DART AEROSPACE
190 S. Danebo Ave., Eugene, OR. 97402
1-800-556-4166
e-mail: sales@dartaero.com
dartaerospace.com

TITLE: ENGINE LIFT ASSEMBLY

DWG NO. 269T3301 | REV 14 | CUSTOMER 1 OF 2

SCALE 1:10 | DATE 5/22/2001 | SHEET 36 OF 37

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
13	16-0203	CH'D PART NUMBER WAS RB41011 IS PLACARD ⚠1 . ADDED NOTE ⚠1 .	11/2/2016	RJC	JAG



DART AEROSPACE
190 S. Danebo Ave., Eugene, OR. 97402
1-800-556-4166
e-mail: sales@dartaero.com
dartaerospace.com

TITLE: ENGINE LIFT ASSEMBLY			
DWG NO. 269T3301	REV 14	CUSTOMER 2 OF 2	
SCALE 1:8	DATE 5/22/2001	SHEET 37 OF 37	